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Inside Dope

By George F. Taubeneck

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Time Out for Laughs

Inasmuch as the writer of "Inside Dope" has undertaken some new responsibilities recently, most of the talks we were scheduled to make before A.S.R.E. section meetings and other industry conclaves this fall have necessarily been cancelled.

On each and every one of these occasions in the past we have tried to have two or three new anecdotes ready to tell the boys (these yarns are more appreciated than is the serious talk, usually!).

Well, we had a number of dandies all saved up for use in this year's "Lettuce League" (banquet circuit) tour. So in this and in the following issue, we'll give them to you in print. Here goes:

Enter a Good Raconteur

Lyall Smith, sports editor of the *Detroit Free Press,* is not only one of the best sports writers in the country, for our money, but is also a delightful raconteur and "good company" in any league.

Two of his best yarns relate to golf. Quoting Mr. Smith:

"A new convert to golf bought a new set of clubs, bought a dozen new balls, and stepped up to the first tee for his initial drive.

"He laughed at the ball, smacked it a mile, and brought a gasp from his caddies as they watched the ball hit the green and bounce into the cup for a hole-in-one.

"At the second tee he unleashed another terrific drive.

"This time the ball took a big hook, curved out, then back onto the fairway, hit a rut in front of the green, bounced wildly, hit a tree, bounded high, plopped onto the green, bounced again, hit the pin, and dropped into the cup for a second ace.

" 'Whew,' exclaimed the new golfer. 'I was afraid for a while that I missed it that time.' "

Then there is the one about the gang of Irish laborers who were leaning on their shovels along a railroad track that paralleled a golf course.

They watched curiously as a dub socked his drive into a deep rut. He took three strokes to get it out and then saw it go into the edge of a water hole.

He took three more and got out only to roll into a trap.

The laborers watched as he hacked away diligently, until he finally got on the green.

He putted, and the ball rolled into the cup.

"Shure and now you did it, laddy," called one of the workmen. "You'll have one helluva time getting it out of that little hole."

Those Wonderful Dodgers

For some reason which escapes most of us, the place-name Brooklyn seems to evoke an automatic laugh out of audiences these days. No gag-writer seems to know why, but they're mighty happy about it.

To be sure, the Brooklyn Dodgers baseball team for more than a decade was the cause of many a bitter laugh and many a derisive catcall. But the Dodgers' fumbling antics surely can't account for the world-

(Concluded on Page 4, Column 1)

Norge Adds Three New Products To Its Line

DETROIT — Three new appliances —a portable electric water cooler (which is claimed to be the first ever marketed), home and farm freezers, and an automatic cycle washer—are being added by Norge Division, Borg-Warner Corp., announces M. G. O'Harra, vice president and general sales manager.

Constituting additions to the company's line of household appliances which includes refrigerators, gas and electric ranges, standard washing machines, and home heaters, these new products will be marketed through the company's dealers as soon as manufacturing conditions are such to permit mass-production, Mr. O'Harra said.

Salient features of the three are as follows:

1. Portable water cooler. Adaptable for use in offices, homes, hospitals, hotels, clubs, and elsewhere. Capacity of 1½ gallons which can be cooled in one hour. Powered with ½-hp. hermetically sealed "rollator" unit.

2. Home and farm freezer. To be offered initially in four sizes, three for the city or suburban home, primarily, the fourth for the farm.

(Concluded on Page 8, Column 2)

450,000 In Year Is Crosley Plan

CINCINNATI—Crosley Corp. plans to manufacture 450,000 Shelvador refrigerators and 1,400,000 home radio receivers in the company's first full year of postwar production, Crosley regional and merchandising managers were told last week by Frank A. Schotters, vice president in charge of production.

The company's Richmond, Ind., plant already is partially converted, he disclosed, and as soon as necessary materials become available it will be turning out 600 refrigerators a day.

Other shifts can be added if sales

(Concluded on Page 37, Column 3)

Admiral Radios Underway; Refrigerators This Month

CHICAGO—Admiral Corp. has announced that reconversion manufacture of radios and record-changer attachments is under way at the No. 2 plant on N. Knox Ave. here, and that refrigerators and ranges will soon be off the assembly lines, also.

"Production of refrigerators will begin in September," announced Ross D. Siragusa, president of Admiral.

Ranges will be available in December, but only for sample and display

(Concluded on Page 37, Column 4)

Millham To Direct WPB General Industrial Group

WASHINGTON, D. C. — The appointment of F. B. Millham as director of the General Industrial Division was announced by the War Production Board.

Mr. Millham replaces William M. Haile, who has resigned to return to industry.

The new division director has been assistant director for the past nine months and prior to that was with the special equipment branch of the division. He went to WPB in 1942. Previously, he was an engineer in the air conditioning and refrigeration industry in his home city, Philadelphia.

Hotpoint's First Ranges Priced At '42 Levels

CHICAGO — With production of three models of electric ranges already begun, Edison General Electric (Hotpoint) Appliance Co. has announced that its ranges will sell at or near 1942 levels.

The 1942 prices on the Hotpoint ranges now being produced, which are "not unlike 1942 models," the company said, were $115, $175, and $240, the latter for a deluxe model.

Low-priced, moderate-priced, and deluxe units are included in Hotpoint's present production.

The first model to come off the line, carrying two pre-cooked hams, with trimmings, which finished cooking during the last hour of the journey through electric testing apparatus, was given the serial number 1,383,377, indicating the number of stoves produced here since 1910.

Gregory L. Rees, manager, range sales division, said that "cooking in ranges on the line is not just a stunt, but more a dramatization of the extensive heating tests given during range manufacture." He noted that oven doors are fitted "when range ovens reach a temperature above 350° F., thus assuring close fit under kitchen conditions."

The range production marks the

(Concluded on Page 37, Column 2)

Locker Mfrs. Group To Discuss 1946 Show

CHICAGO—One of the principal items of business to be discussed at the Frozen Food Locker Manufacturers and Suppliers Association meeting Sept. 13 through 15 at the Edgewater Beach hotel here, will be plans for a locker plant and frozen food industry show to be held in Kansas City possibly sometime next spring.

Sponsoring organizations for this show would probably include the National Frozen Food Locker Association, and the Farm and Home Freezer Manufacturers Association.

First business session of the Frozen Food Locker Manufacturers and Suppliers Association meeting next week is scheduled for 1 p.m. Thursday, Sept. 13. Luncheons are planned for each of the three days, and a dinner for the entire group is scheduled for Friday night, Sept. 14.

Philco Expects Volume Production In 6 Weeks

PHILADELPHIA — Assembly line production of 1946 refrigerators has been started by Philco Corp. and within the next six to eight weeks should reach prewar volume, it was announced by John Ballantyne, president.

"Philco is doubling its production facilities to meet the pent-up demand for refrigerators," Mr. Ballantyne said. "When reconversion is completed, employment in the company's refrigerator division should be substantially greater than in 1941."

Kelvinator May Buy Interests In England

LONDON, Ont., Canada — Nash-Kelvinator Corp. has made an offer of $615,000 to Kelvinator of Canada, Ltd., for the issued and outstanding capital stock of Kelvinator, Ltd., of London, England, and all rights held by the Canadian company in respect to territories outside Canada.

(Concluded on Page 37, Column 2)

Kelvinator Moves Assembly Setup To Up Production

DETROIT—The entire refrigerator assembly operation of Nash-Kelvinator Corp. is being moved from Detroit to Grand Rapids, Mich., as part of a program to boost the company's appliance production and sales to more than 1,100,000 units a year, announces George W. Mason, president.

The new Kelvinator and Leonard manufacturing program calls for the expenditure in Grand Rapids of approximately $2,400,000 in the next few months, new construction, wholesale changes in production procedures, and substantial increases over prewar employment levels, he said.

Mr. Mason revealed that although Kelvinator is doing much more than a reconversion job in its plants, the program is moving at a pace which

(Concluded on Page 37, Column 2)

Washer Firm Sued On Price Charges

CHICAGO—Charging the delivery of 5,000 washers at approximately 25% above ceiling prices, OPA has filed suit in Federal Court for $150,000 triple damages against the Electric Household Utilities Co. here.

This case is the first reconversion price suit in the country, according to Rae W. Walters, regional OPA administrator.

According to charges filed in OPA's suit, the company sold the 5,000 washers at above-ceiling prices with the stipulation that the prices charged were subject to OPA approval and with the agreement that purchasers would be given credit for overcharges if the OPA eventually decided on a lower price ceiling.

OPA declared that representatives of the company stated at a recent conference with OPA officials that the increased prices were charged because the company expected OPA to authorize such increases in the manufacturer's prices for its washers.

Edward N. Hurley, chairman of

(Concluded on Back Page, Column 1)

Detroit Approves New Refrigeration Code

DETROIT — A municipal refrigeration code regulating the design, construction, installation, and maintenance of all refrigerating systems in the City of Detroit will go into effect Sept. 27, following approval by the common council.

The code was originally introduced in September of 1939, following a series of open meetings between the city's Department of Buildings and Safety Engineering and representatives of users, manufacturers, contractors, and other agencies. Since 1939 there have been more conferences resulting in some changes in the code as originally submitted. The

(Concluded on Page 37, Column 1)

Detrola, Uni. Cooler, Utah Merger Vote Up Sept. 26

DETROIT — Meetings of stockholders to vote on the proposed merger of Universal Cooler Corp. and Utah Radio Products Co. into International Detrola Corp. will be held by each company on Sept. 26.

Detrola shareholders will meet in Elkhart, Ind. at the company's offices there. Utah's meeting will be at the general office of that corporation in Chicago, and Universal Cooler holders will meet in Detroit at its Ford Bldg. offices.

Industry Show, Rema Meeting Dates Are Set

Exhibition in Cleveland In October '46; Rema To Meet This Fall

PITTSBURGH — The All-Industry Refrigeration and Air Conditioning Show, sponsored by Refrigeration Equipment Manufacturers Association, will be held at the Cleveland Public Auditorium the last four days of October, 1946, it has been announced by Rema headquarters here.

Rema will hold a membership meeting Nov. 7 to Nov. 9 this fall at The Homestead in Hot Springs, Va., and a spring "joint meeting" to which parts jobbers and service men will be invited, from March 4 to March 7, 1946, at the Stevens hotel in Chicago.

The show committee, under the leadership of K. B. Thorndike, vice president of Detroit Lubricator Co., will make future announcements on exhibition space contracts and other details for the show. It will open on Monday, Oct. 28, 1946, and will close on Thursday, Oct. 31, 1946. The Cleveland hotel has been designated as headquarters for exhibitors.

Rema President F. J. Hood called the membership meeting for this fall, pointing out that a meeting of the full membership was needed to take

(Concluded on Back Page, Column 1)

Electrical Firms To Sue N.Y. Unions Again

NEW YORK CITY—Ten electrical equipment manufacturers will shortly petition Federal Court for reinstatement of their 10-year-old suit for damages totaling $1,350,000 against Local Union 3, International Brotherhood of Electrical Workers, according to Walter Gordon Merritt, attorney for the manufacturers' group.

The suit was originally filed by manufacturers outside of New York City, who charged that the union and New York City manufacturers of electrical equipment and contractors had agreed that electrical equipment installed in New York City had to be manufactured, purchased, handled, and installed by members of Local Union 3 and the local producers and contractors.

Plaintiffs in the suit are the Clark Controller Co., Colt's Patent Fire Arms Mfg. Co., Cutler-Hammer, Inc., the Electric Controller & Mfg. Co., General Electric Co., the Okonite Co., John J. Witman (trading as the Reading Chandelier Works), Square D Co., Trumbull Electric Mfg. Co., and Westinghouse Electric Corp.

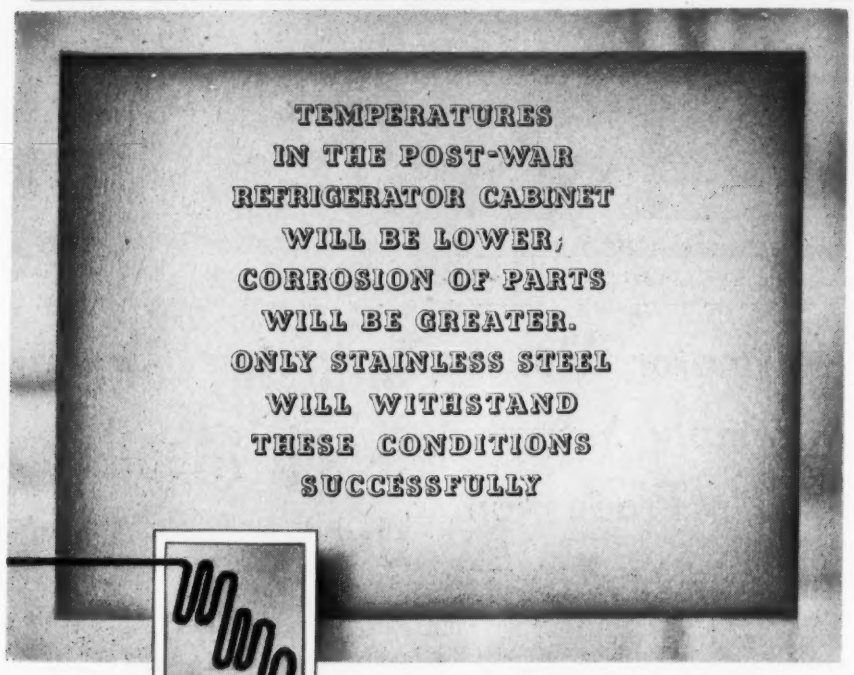
(Concluded on Page 37, Column 3)

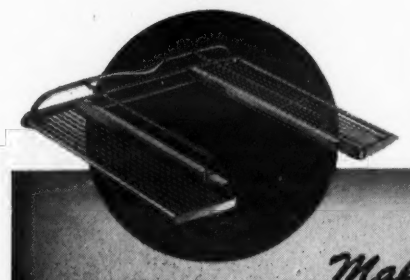
Washer Men Enter Plea For New Pricing Method

WASHINGTON, D. C.—"Sweeping changes, or possibly the substitution of an entirely new method for arriving at a reconversion pricing factor" will be necessary before washing machine manufacturers can move their products into consumers' homes, representatives of the washer and ironer industry told OPA price executives last week.

The washer men declared that the 5.2% maximum price increase which manufacturers can add to their 1941 billing prices "does not reflect the actual material, labor, and parts cost increases that have taken place and which the industry must meet if it is to resume manufacturing and selling."

R v. 46 Sept. - Dec. 1945





WALL WIRE PRODUCTS COMPANY

11333 GENERAL DRIVE
PLYMOUTH, MICHIGAN

Makers of STAINLESS STEEL AND RETINNED REFRIGERATOR SHELVES AND WELDED WIRE PRODUCTS

Chicago Dealer Group Formed as Part of Electric Association

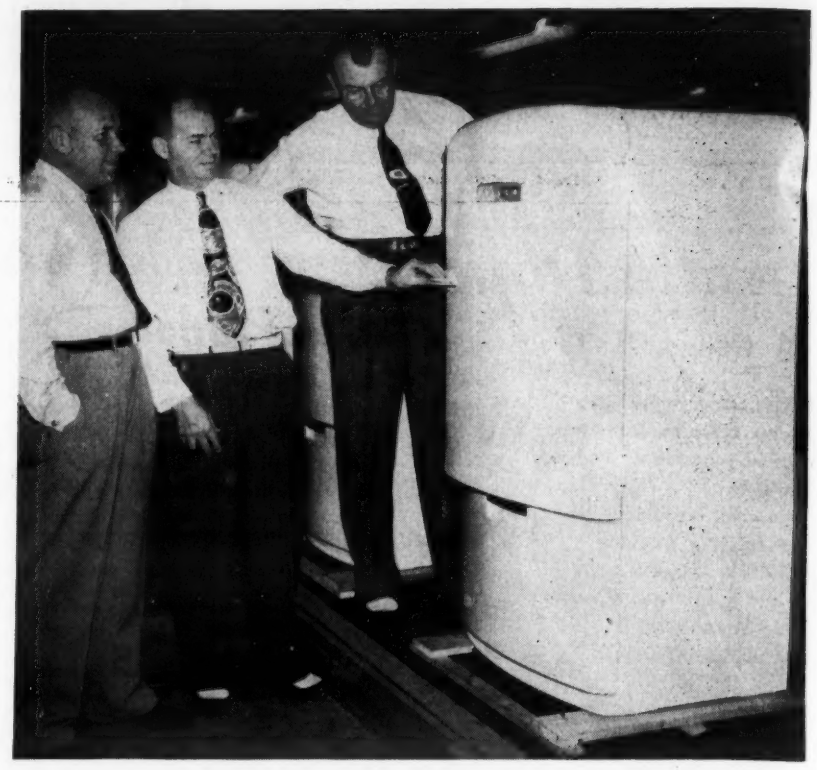
CHICAGO—With more than 200 applications for membership approved, a new Radio and Appliance Dealer Group has been organized here as a part of the Electric Association of Chicago.

A steering committee for the appliance dealer group has been named which includes Jack Pekow, Acorn Battery & Tire Co. (Loop area); T. J. Reedy, North Town Refrigeration Co. (north of Belmont Ave.); Jack Maypole, Maypole Boats and Motors (Madison to 51st); Bernard Gross, Gross Radio & Electric Shop (51st to 75th); Harry Miller, Harry Miller Appliances (south of 75th); Frank J. Zabkar, West Side Radio Sales & Service (south suburbs); Theodore Osberg, Riverside Electric Co. (west suburbs).

The organizing committee that helped to set up the new dealer group included Gene Ball, Commonwealth Edison Co. (chairman); G. C. Heisterman, Public Service Co. of Northern Illinois; A. J. McGivern, Chicago Electrical Wholesalers Association; J. E. Strecker, General Electric Co.; E. K. Ploner, Chicago Flexible Shaft Co., and A. A. Gray, secretary-manager of the Electric Association.

One of the objectives of the association is to bring into open discussion such problems as franchise limitations, industrial selling, back yard selling, and attitudes of manufacturers and wholesalers.

Philco Executives Inspect the 'First'



Philco postwar refrigerators start rolling off the company's assembly lines in volume again as Walter H. Eichelberger (left), sales manager of the refrigerator division, W. Paul Jones (center), vice president in charge of the division, and Thomas A. Kennally, vice president in charge of sales, inspect the first postwar assembly-line production model.

Eureka's Product Plans Told at Newark Meeting

NEWARK, N. J. — New Jersey dealers received their first view of Eureka Vacuum Cleaner Co.'s new home cleaning system, cordless electric iron, and electric garbage disposer at a recent meeting conducted at Hotel Sheraton here by Krich-Radisco, Inc., Eureka distributor.

"First deliveries of Eureka vacuum cleaners and cordless electric irons are expected about mid-September," Paul R. Krich, executive vice president of Krich-Radisco, told the dealers.

He announced that Eureka, for the first time, will offer a complete home cleaning system, consisting of an upright vacuum unit for floors, rugs and carpets, a tank-type cleaner for furniture, drapes, and other "above the floor" cleaning, and a set of connectible attachments, including a power-driven floor waxer.

Mr. Krich then introduced Andrew K. Leach, general sales manager of Krich-Radisco, who discussed the dealer merchandising program.

Sound slide films and skits using professional actors and actresses presented the retail selling plan on the Eureka home cleaning system—the Eureka tailored market coverage plan, and the other Eureka products —the cordless electric iron, and the garbage disposer.

George Wilkons, Eureka eastern sales manager, then presented the home cleaning system, demonstrated its various uses and functions and told the dealers that for the first time in vacuum cleaner history a manufacturer had to put this product in the major appliance class.

M. W. Lloyd presented the new cordless electric iron, and Howard Turner presented the electric garbage disposer.

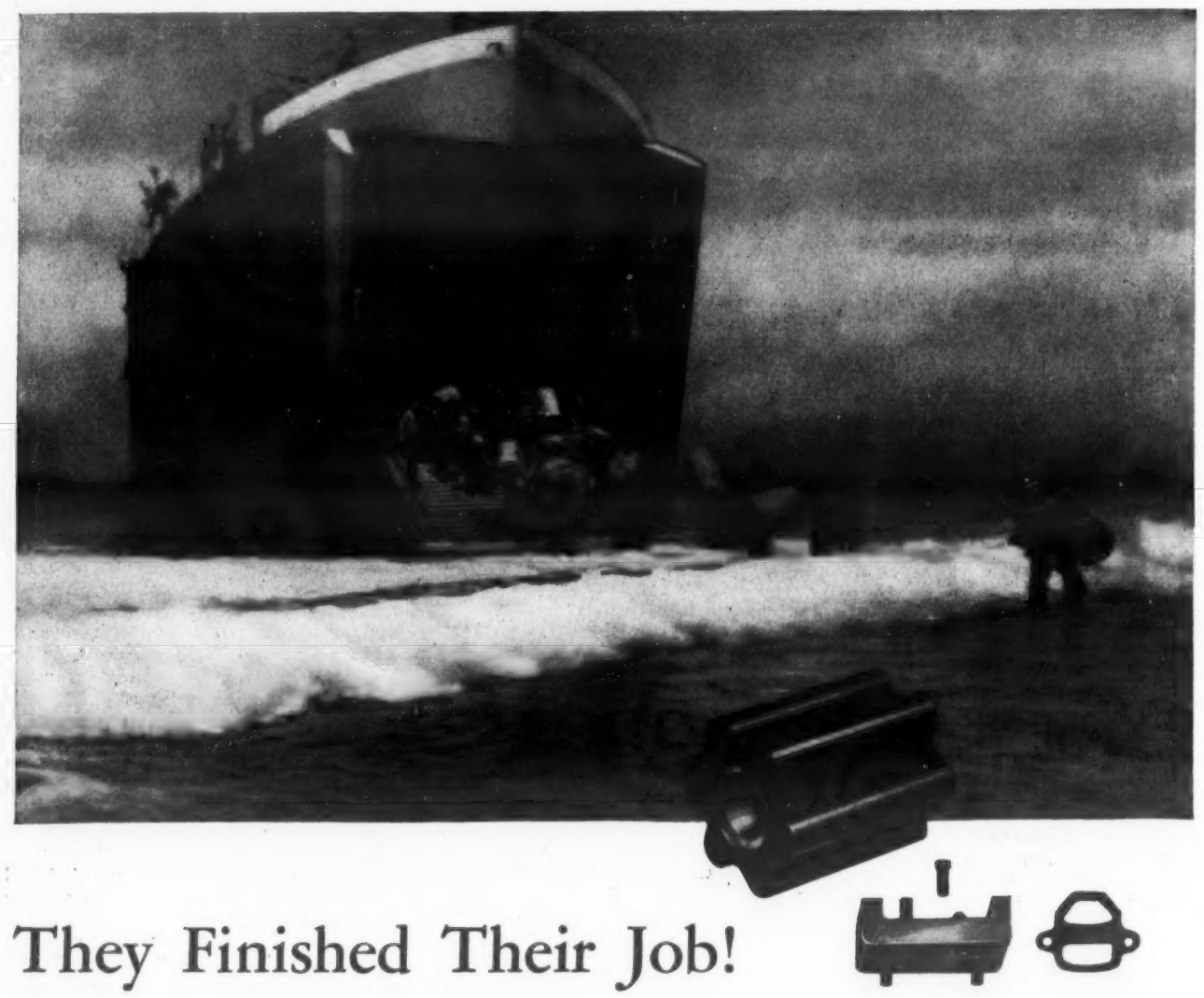
Hike Newell, vice president of Geyer, Cornell, & Newell, Eureka's advertising agency, presented the advertising and sales promotion program which he claimed is the most elaborate, most extensive in the vacuum cleaner industry.

Admiral Offices Now At Its Main Plant

CHICAGO — Admiral Corp. has consolidated its main offices in its principal plant at 3800 W. Cortland St. Space previously occupied at 444 Lake Shore Drive will be taken over in its entirety by Appliance Distributors, Inc., the company-owned distributor of its products here.

The move brings to Cortland St. L. H. D. Baker, vice president of the appliance division; Wallace Johnson, national field activities manager; Harold Conklin, manager of the electric range division; Seymour Mintz, advertising manager; Sam Adler, chief designer; Willie Mae Rogers, home economist, and their respective staffs.

Extensive remodeling at the Cortland St. plant is still in progress and when completed will include a model kitchen, special display and testing quarters, and additional engineering research accommodations.



They Finished Their Job!

Today there are smiles on the faces of young Americans who only "yesterday" were grimly facing tough amphibious operations involving Landing Craft, Tank and Artillery Lighters, Torpedo Boats, Sub Chasers and other combat craft. They finished their job and won the everlasting thanks of their countrymen.

On thousands of such craft, and their Diesel engines, countless small rubber parts by Inland dampen vibration, cushion shock and contribute greatly to the efficiency of machinery and equipment.

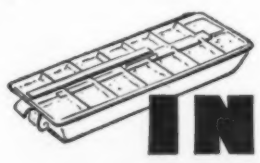
Inland's long experience in compounding, molding and finishing of synthetic and natural rubber for the mobile products of great peacetime industries was quickly and successfully applied to the manufacture of parts for U. S. Naval craft.

Now Inland is again "converting." This time to produce new and better products which will help bring greater convenience and luxury to peacetime living.

INLAND MANUFACTURING DIVISION
General Motors Corporation *Dayton, Ohio*

BUY VICTORY BONDS

Inland Products for Victory were Carbines, Tank Tracks, Gun Sights, Helmet Liners, Extinguisher Horns, Mortar Bomb Plastic Fuse Body and Rubber, Synthetic Rubber and Metal Parts for Tanks, Aircraft, Submarine Chasers, Torpedo Boats, Artillery Lighters and Landing Craft.



INLAND *Manufacturing*
RUBBER, METAL, PLASTICS

Pipe and Tube
Bending — Welding — Fabrication

Many foremost manufacturers, having discovered our specialized skill in our particular line, have entrusted us with a great variety of precision pipe and tube work, including bending, coiling, expanding, flattening, brazing and welding.

Swan engineers and technicians, dealing continually with piping, can advise on your bending requirements and offer valuable suggestions on design and economical methods of installation. We invite your inquiries.

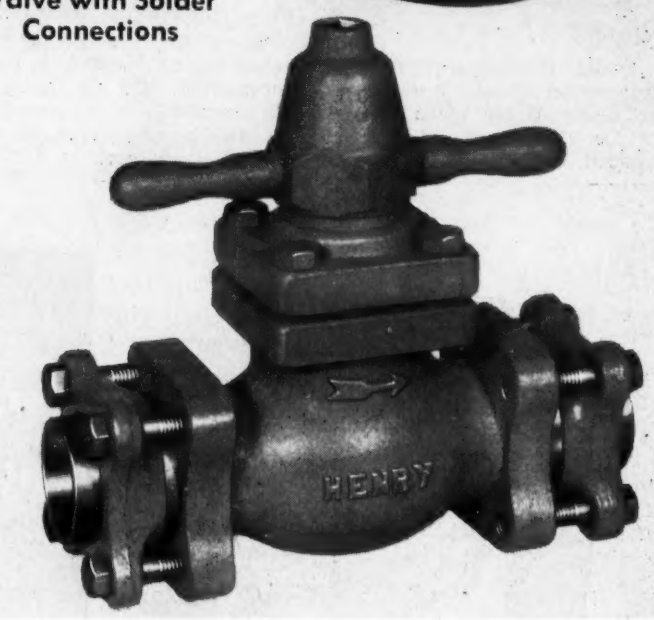
SWAN ENGINEERING COMPANY, Inc.
748 Frelinghuysen Avenue
Newark, N. J.

Tech

HENRY WING CAP VALVES

Have This Patented Rotating Self-Aligning Stem Disc

Non-Ferrous Alloy Globe Valve with Solder Connections



Semi-Steel Flanged Globe Valve with Companion Flanges, Sleeves, Bolts and Gaskets

Semi-Steel Angle Valve with Pipe Thread Connections

This simple, effective design assures long, trouble-free service

1. Valve Stem.
2. Stem packing set.
3. Spring—this provides proper cushion between valve stem and stem disc making disc self-aligning and chatterproof.
4. Spring Retaining Ring holds steel locking pins in position.
5. Steel Locking Pins. These enter side groove in stem disc and corresponding groove in valve stem.
6. Replaceable Rotating Stem Disc has soft, metal alloy insert which makes contact with seat in valve body.

● Wing Cap Has Socket to Engage Valve Stem for Opening and Closing Valve

YOU can expect longer service through easier closing action from Henry Wing Cap Valves as a study of the exploded view of the valve stem assembly will prove. The rotatable stem disc has an alloy metal seating surface and is replaceable. This surface makes instant contact with the valve seat, thus disc wear is held to a minimum. Further closing action presses the stem disc onto the seat overcoming any distortion of the alloy metal.

Henry Wing Cap Valves are back-seating—packing rings and cones are self nesting requiring a minimum of compression to establish a seal around valve stem and stuffing box wall. Developed especially for Freon and Methyl Chloride, they assure long service life. Added protection against leaks is provided by the gasketed joint between the wing cap and the valve bonnet. Long stem travel and full capacity passages assure unrestricted flow.

Non-ferrous type valves have solder connections machined directly in valve body. Semi-steel valves have screw ends in which solder adapters can be inserted. Other semi-steel valves are of the flanged globe type which have rotating forged steel, distortion-proof companion flanges. Soldering or welding of tubing or pipe to flange sleeve can be done without transmitting heat to valve seat. Design permits easy removal of valve from line if necessary. Companion flange can be rotated freely on the sleeve, assuring quick, easy line up with valve body during installation. You are invited to write for Henry Catalogs describing these valves as well as other Henry Products.

Sold Through Jobbers

HENRY VALVE COMPANY

HENRY VALVE CO.

3260 West Grand Avenue, Chicago 51, Illinois

Export Department: 13 E. 40th St., New York 16, N. Y. Cable: ARLAB

PACKLESS AND PACKED VALVES • STRAINERS • DRYERS FOR REFRIGERATION AND AIR CONDITIONING
AMMONIA VALVES • FORGED STEEL VALVES AND FITTINGS FOR OIL, STEAM AND OTHER FLUIDS

Inside Dope

By George F. Taubeneck

(Concluded from Page 1)

wide guffaw-appeal of the name, Brooklyn.

But just in case, we'd like to relate the best of all the gags perpetrated on the hapless Dodgers.

Two Brooklyn fans had made a date to meet at the ball game. One was a bit late. As he made his way to the appointed box, his friend shushed:

"Take it easy, Joe. Cross your fingers. The Dodgers have three men on base."

"Which base?" asked the latecomer, stifling a yawn.

So What?

Horse racing is one form of sport which this writer doesn't appreciate. However, many of our close friends do, and for them we'll close this recapitulation of the best sports-laughs we ever heard with a racing anecdote.

Joe Punk had an understanding wife, and one sunny Saturday afternoon she let him have two bucks to go out to the track and try his luck.

It was phenomenal. He played the favorite in the first race, and collected $10. On the second, he picked another winner, and pocketed $50. Third race, another winner. His stake now was up to $400. Fourth race, again he won; fifth race, likewise. On the sixth race he staked all his winnings—and on a hunch as you might be sure.

He won again, at 30-to-1, and at this point was a cool $18,000 ahead.

When the seventh and last run came up, he decided to play it conservatively. He bet all his money on the favorite, on the nose. But the favorite burst a seam, or something, and finished last.

When our unperturbed friend returned home, his wife asked him how his luck had turned out.

"Oh," he rejoined, "I blew the deuce!"

Remarks on Bridge

Poker has occupied our attention in this column occasionally, but so far we haven't put a word in for bridge. Personally, we don't see how you can. Bridge is deadly serious business. To wit:

"Shall we have a friendly game of cards?"

"No. I'm not in the mood. Let's play bridge."

And:

"All right, blankedly-blank it, how would you have played that last hand I was dealt?"

"Under an assumed name."

Advertising Results

One of the quickest result-getting want-ads we've ever heard about was inserted by a negro in the Memphis *Commercial-Appeal*:

"LOST, STRAYED, OR STOLEN—Mangy bird dog, answers to name of George. Will show signs of hydrophobia in about three days."

Next morning after this classified was published, George was home, on the front doorstep.

That's Different!

Lord Halifax, that saintly and scholarly representative of the British Empire in Washington during the crucial period when Britain's continued existence depended upon our willingness to fight overseas, was once reassured as to our intentions by a journey.

This journey took the form of a personally conducted tour of Army and Navy Proving Grounds, where he could see American "secret weapons" being tested.

After having been impressed mightily by the shape of things to come, and after having witnessed some of the most carefully-guarded secrets in the American Arsenal of the Future, Lord Halifax retired to the room assigned him in the comfortable officer's quarters at Annapolis.

Upon arising next morning, he started out to take his customary pre-breakfast brisk walk. Soon he was halted by an adamant midshipman.

"Where do you think you're going?" challenged the midshipman.

"For a walk," replied Halifax.

"Well, you can just turn around and go back," ordered the sentry.

"Why?" asked Halifax, curiously. After all, he had just been shown all the American armament secrets any one man could expect to absorb.

"Because," said the young man, "just behind me our team is holding secret practice for the Army football game!"

Lord Halifax never quite got over this.

What Man Hath Wrought

When the National Cash Register Co., after years of vicissitudes, began to roll in dough, President John Patterson began spending in earnest.

His luxurious home in The Hills east of Dayton was marvelous just as it stood, in its natural setting. But Patterson, as usual, wasn't satisfied.

He ordered his henchmen to move aged trees hither and yon—to improve the view. He had the grounds re-sodded, in the hope of achieving golf club greens perfection. He spent an extravagant amount of money to have the course of a river changed, so that his estate would be watered—not by one, but *three* babbling brooks, plus a 90-foot-high waterfall.

Hedges were planted on a 40-mile circumlinear basis. Rhododendrons, violets, sweet peas, carnations—yes, and even hot-house orchids and gardenias—were planted and tenderly nurtured.

The result was admittedly spectacular.

"It just goes to show you," remarked John Boyd one time to a visiting fireman from the N. W. Ayer advertising agency, "what God could do if he had an unlimited expense account!"

It's On the Cuff

You can never tell what will attract people. To build up a southern clientele, ace-copywriter John Boyd once planned a spring advertising program to be placed in southern newspapers. As a starter, he wrote an advertisement stressing this hotel's "homelike atmosphere," but that was such a worn-out phrase he wanted to better it.

While awaiting inspiration, he dropped in a couple of dummy words, intending to have one of the lesser ad writers supply his deficiency.

How this copy got by, he never learned, but a few weeks later Dixieland must have been startled to read in 20 leading newspapers:

"A gentleman of the South, his wife, and family, will find all the hooey and whatzis of a refined home at the Hotel Stiffbill."

As you, erudite reader, might suspect, that hotel did a very good summer business that year.

Hurry, Mailman!

John Boyd tells another beaut about the actress who was retained to play a leading role in one of a big corporation's industrial movies.

About three months before receiving this assignment, this actress got married—for the first time. The marriage didn't take. A quick divorce was arranged.

Shortly after starting work on the industrial picture, this actress picked up a newspaper and read that her ex-husband had remarried. Believe it or not, this news was quite a jolt. Without warning she jumped into her convertible and drove home.

Some people take news of that sort one way, and some another. This girl apparently wanted to rub salt into her wounds. So she started re-reading the love-letters this Lothario had written her.

In the course of this self-abuse she came across a carton of newly engraved, never used calling cards, emblazoned with the name of her ex-husband and the prefix "Mrs."

In a minute she was smiling—nay, grinning!

Wrapping this precious parcel and addressing it to her feminine successor took but a minute. But for days thereafter she howled over the note she sent alongwith:

"Dear Gloria:" (it read) "I hope these cards arrive in time for you to use one or two."

SELL IT NOW Mr. Distributor!

•

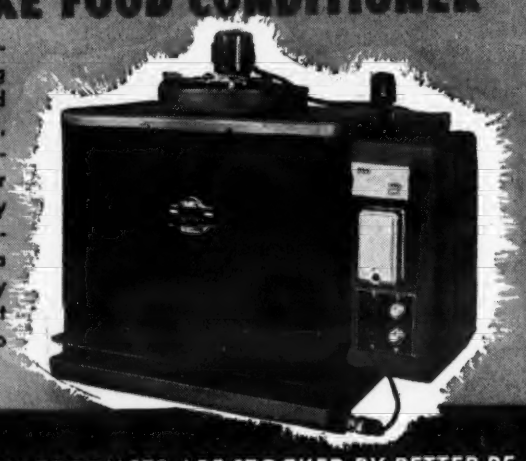
AMCOIL GIVES YOU EXTRA SALES HELPS

HERE'S THE OPPORTUNITY YOU'VE BEEN LOOKING FOR...

Specially designed units for Coolers and Display Cases ... for Butchers, Grocers, Hotels and Restaurants

AMCOIL DELUXE FOOD CONDITIONER

A complete refrigeration system, except for condensing unit. Completely assembled with temperature control, humidistat, switches, expansion valve and a humidifier designed to make up for any deficiency in moisture content and thereby maintain a relatively high humidity which will reduce product shrinkage and trim losses to a minimum.



DEALERS: AMCOIL PRODUCTS ARE STOCKED BY BETTER REFRIGERATION JOBBERS FROM COAST TO COAST

Check these AMCOIL Aids to Selling:

1. National advertising
2. Advanced design and styling
3. Complete line of models and sizes
4. Consumer acceptance
5. Field tested
6. A model for every application
7. Highest quality at lowest prices
8. Built-in heat exchangers
9. Complete with mounting brackets
10. Easy to install

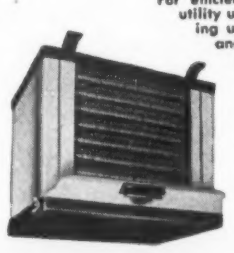
ZERO-BREEZE LOW TEMP UNIT

A low-temperature unit equipped with automatic electric defrost . . . wall mounted model produces temperatures from +20° F. to −20° F. .. defrosts automatically on each off-cycle of condensing unit.

Model	BTU/HR 10° MTD	List Price
RZB 60	3,900	$325.00
ZB 120	7,250	425.00
ZB 150	11,000	615.00
ZB 180	14,500	655.00

ALSERVICE OPEN-FACE UNIT

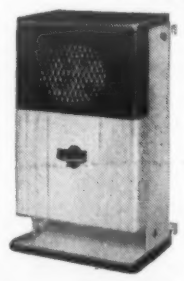
For efficient cooling and for general utility use where a forced draft cooling unit is required. Streamlined, and attractively finished in grey and black, it produces temperatures down to 36° F.



Model	BTU/HR 15° MTD	List Price
OC 44	4,000	$120.00
OC 48	5,100	148.00
OC 58	7,500	161.00
OC 84	11,000	210.00
OC 128	15,500	322.00
OC 168	23,000	370.00

ALSERVICE REACH-IN PANEL UNIT

A compact cooling unit for all utility refrigeration applications. Designed to meet a growing demand for medium-capacity units to balance condensing units of ¼, ⅓, ½ or ¾ hp. Especially suited for reach-in and small walk-in boxes where temperatures of 36° F. are required.



Model	BTU/HR 15° MTD	List Price
RI 15	2,000	$94.00
RI 20	3,000	108.00
RI 20S	3,600	129.00
RI 25	2,250	99.00
RI 30	3,000	114.00
RI 40	5,250	149.00
RI 45	6,150	169.00

MANUFACTURER'S REPRESENTATIVES

William D. Keefe, Chaffe, N. Y.
P. J. Burrill, 800 N. Clark St., Chicago, Ill
J. J. Madden, 212 Madison St., Dedham, Mass.
J. E. Oliphant & Co., 505 Uhler Bldg., Marion, Ohio
Robbins-Greenwood Co., 3104 Main St., Houston 4, Texas
F. M. Eversden & Associates, 220 S. 16th St., Philadelphia, Pa.
R. Barthelmess Sales Co., 1711 Chalen Ave., Jacksonville, Fla
Jordy Engineering Co., Inc., 813 Howard Ave., New Orleans 13, La.

AMCOIL AMERICAN COILS CO.
25-27 LEXINGTON STREET • NEWARK, N. J.

421

Not just a Living— a Way of Life!

It's really what every man wants . . .

Not just a living . . . but *a way of life* that provides the opportunity for building a profitable, happy future.

The opportunity to have those things every man strives for . . . security for himself and his family . . . the friendship and respect of his community . . . a deep personal faith in the future and the value of his business.

Yes . . . add them all together and they total the things *you're* working for . . . things that come with sound, long-term personal planning.

And this is the reason the Kelvinator Franchise is so highly prized by the select group holding it. For Kelvinator believes in this kind of future for each of its Retailers . . . in a higher standard of business and human relations.

This thinking is the basis of Kelvinator's "Retail-Minded" policy that *no sale has been completed until the product leaves the Retailer's floor.* Kelvinator's entire sales program works to this end . . .

Selective Distribution Pattern— Kelvinator's retail organization is composed of not the most, but the finest Retailers . . . thus, with fewer Retailers, each with an adequate market, the result is more sales per dealer.

Less Inventory Investment— Kelvinator's line of products is so simplified and compact as to reduce Retailers' investments in inventory to the lowest. Each line is priced in accordance with Kelvinator's vigorous competitive policy . . . with salable values at each phase of Kelvinator's profit-building, step-up plan.

Point-of-Sale Power—Kelvinator's "Retail-Minded" merchandising means a complete program of advertising, sales promotion and sales training—sales building power aimed at one target . . . moving merchandise off the retailer's floor.

Yes . . . these are the reasons why Kelvinator means a personal business *future* for the Kelvinator Retailer . . .

Why the Kelvinator Franchise offers an opportunity to build the future every man wants!

The most Valuable Franchise in the Appliance Industry

LOOK AHEAD WITH RETAIL-MINDED

Kelvinator

DIVISION OF NASH-KELVINATOR CORPORATION

Kenosha • Milwaukee • DETROIT • Grand Rapids • Lansing

Tune In

SUNDAY ON N-K RANCH! *Nash-Kelvinator's hit musical program Sundays 4:30 P. M., E. W. T. American Broadcasting Company.*

Now With Valve Firm

R. C. ROBERTSON
Named to manage eastern office for Superior Valve & Fittings Co.

Robertson Heads Eastern Office of Superior Valve

PITTSBURGH—R. C. Robertson has been appointed to manage the eastern district office of Superior Valve & Fittings Co., according to W. A. Siegfried, sales manager for the company.

With the district territory including eastern states from Maine to North Carolina, and the eastern half of New York and Pennsylvania, Mr. Robertson will make his office headquarters at 60 East 42nd St. in New York City.

Before joining Superior this June, Mr. Robertson had been with the Airtemp Division, Chrysler Corp., as assistant general sales manager and New York manager of the national accounts department.

Previously he had been associated with York Corp. as commercial regional supervisor, and Carrier Corp. as dealer supervisor.

He is a member of A.S.R.E.

Cooper and Curran New Williams District Men

BLOOMINGTON, Ill. — Appointment of Joseph C. Cooper and Howard C. Curran as Williams-Oil-O-Matic district representatives was announced by W. A. Matheson, vice president of that division of Eureka recently.

Mr. Cooper will supervise the New England territory of the company. His experience in oil heating in the New England area dates back to 1925 when he joined Petroleum Heat & Power Co. as a salesman.

Mr. Curran was named Midwestern district representative and will take up his new duties immediately upon completion of the district representative's school here. He brings to his new job 21 years of sales and advertising experience throughout the country.

Both men will carry on their work under the direction of C. W. Cornelssen, heating sales manager.

Linehan Joins Chicago Staff of Penn Switch

CHICAGO—Lester D. Linehan has joined the Chicago branch office of Penn Electric Switch Co. as a sales engineer, where he will work with E. B. Maire, branch manager, announced R. H. Luscombe, Penn sales manager.

For the past two years Mr. Linehan has been a field engineer with U. S. Electrical Motors, Inc. He was also a heating sales engineer for 15 years with the Peoples Gas Co. in Chicago.

Burr Is Chief Engineer Of Kold-Hold Co.

LANSING, Mich.—L. R. Burr, who joined the engineering staff of Kold-Hold Mfg. Co. several months ago after service with the Trane Co. of La Crosse, Wis., has been named chief engineer of Kold-Hold.

With Minneapolis Firm

J. L. ARMSTRONG
New general sales manager for Schaefer, Inc.

* * *

Armstrong Heads Sales For Schaefer Cabinets

MINNEAPOLIS — Appointment of J. L. Armstrong as general sales manager of Schaefer, Inc., manufacturer of low temperature frosted food and ice cream cabinets, is announced by H. L. Schaefer, president.

As head of the Schaefer nationwide factory and sales representatives' organizations, Mr. Armstrong will integrate the firm's sales, advertising, and sales promotion programs in the distribution of the Schaefer line of commercial frosted food and ice cream cabinets and the "Pak-A-Way" series of home and farm freezers.

Mr. Armstrong joins the Schaefer company with a background of over 12 years in sales, sales promotion, and advertising work in the Twin Cities. He was with Standard Oil for 11 years, four of which he served as assistant sales manager.

Kerotest Sets Up Coast Office on Steel Valves

LOS ANGELES—Establishment of a new warehouse here with J. A. Swaton as district manager for steel valves and J. A. Norris as district manager of its brass division has been announced by Kerotest Mfg. Co.

Van D. Clothier will continue as southern California representative for Kerotest brass valves, operating from 1015 E. 16th St.

Mr. Swaton, with Kerotest for more than 20 years, and Mr. Norris will maintain headquarters in the new warehouse, located at 3311 E. Slauson Ave.

A plug for air conditioned offices . . .

A boost for aerosols . . .

Ever see an invisible "fly swatter"?
Musca domestica—fancy for house fly—is due for a short life. Why? Because soon, invisible "fly swatters" will await his unwelcome arrival everywhere.
They'll be new insecticidal aerosols of amazing characteristics. They'll "float" in the air with the greatest of ease and stay suspended for many minutes. They'll "swat" flies, gnats, mosquitoes, and all manner of insects . . . killing them quicker than you can say "Jack Robinson". Yet they will be harmless to people and pets.
insecticide and breaks it into such minute particles that they remain suspended in the air for twenty minutes or more.
Today, "Freon" is available for aerosols as well as for air conditioning systems and refrigerators. So, before long, you may purchase new aerosol insecticides which will quickly, and more easily, rid your home (probably your garden, too) of every insect that may invade it. Kinetic Chemicals, Inc., Tenth and Market Streets, Wilmington, Delaware.
safe refrigerants
If wishes were horses . . .
"If wishes were horses, beggars might ride" . . . so goes the saying. And if wishful thinking in hot, stuffy weather brought results, many a busy office might be set by the side of a bubbling brook.
Of course, modern air conditioning can't give you the tang of the woods, but it can and does bring clean, fresh, invigorating air into the picture. It boosts morale in any office . . . increases efficiency as much as 50' . . . promotes health.
"Freon" refrigerants are widely used in office air conditioning systems. They're safe, non-toxic, non-flammable, and provide efficient refrigeration at low cost. War requirements are still taking large quantities of "Freon". But recently enlarged facilities have made "Freon" again available for every purpose. Kinetic Chemicals, Inc., Wilmington 98, Delaware.
Save Waste Paper—Vital to War
FREON safe refrigerants
"Freon" is Kinetic's registered trade mark for its fluorine refrigerants

This "FREON" Advertising in TIME Makes Your Selling Job Easier

And it's advertising that helps you because it is designed to do these two things:

1. Help sell air conditioning, refrigeration, frozen foods, home quick freezers, locker plant services and, now, aerosols. It encourages contacting air conditioning engineers for advice. And it ties in with the advertising of equipment manufacturers . . . helps make your "selling" job easier.
2. It acquaints people with the advantages and benefits of "Freon" safe refrigerants *and* their present availability.

Two more recent attention-getting "Freon" advertisements in TIME Magazine.

"FREON" is also extensively advertised in leading architectural papers and in food manufacturing and locker plant journals.

And now that "Freon" refrigerants are available in any quantity for comfort cooling systems, refrigerating installations, locker plants and aerosol manufacture . . . its use is being rapidly extended. Many systems that were converted to wartime substitute refrigerants are now being re-converted to "Freon". Kinetic Chemicals, Inc., Tenth and Market Streets, Wilmington 98, Delaware.

AMPLE "FREON" NOW

Enlarged production facilities have made possible a greatly increased supply of "Freon" for comfort cooling systems and other civilian uses.

KINETIC

FREON *safe refrigerants*

REG. U. S. PAT. OFF.

"Freon" is Kinetic's registered trade mark for its fluorine refrigerants and propellents.

NORMAL SUCTION PROCESS WATER COOLERS

6 to 25 gallon capacities.

Compact in design...can be mounted on floors, walls or ceilings.

Suitable for drinking water bubbler service, cafeteria or restaurant glass filler service.

WRITE FOR LATEST DATA

DAY NIGHT COOLER DIVISION
DAY & NIGHT MFG. CO.
MONROVIA • CALIFORNIA
FACTORY REPRESENTATIVES
NEW YORK: A. C. Homeyer, 682 Bdwy.
CHICAGO: Marc Shantz, 565 Wash. Blvd.
ST. LOUIS: R. H. Spangler, 3311 Market St.
ATLANTA, GA.: J. E. Parker, 2941 Peachtree, N. E.

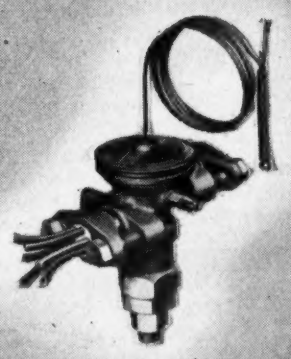
"DETROIT" VALVES
FOR BETTER PERFORMANCE

"Detroit" Expansion Valves and Detroit Solenoid Valves stand high in the favor of refrigeration men everywhere because they do the job better, and last longer. There is a "Detroit" Valve for every refrigeration need. Write for bulletin.

No. 897 Dura-fram Thermostatic Expansion Valve for commercial applications. Compact and easy to install.

No. 673 Thermostatic Expansion Valve. For many years the standard of the refrigeration industry.

No. 899 New Dura-fram Thermostatic Expansion Valves for commercial installations. Furnished with external equalizer and forged union connection.



No. 788 Dura-fram large capacity Thermostatic Expansion Valve, with No. 790 Distributor, showing the distributor tubes and equalizer connection.

No. 793 Differential Temperature Expansion Valve specially designed for temperatures below *minus* 30° F.

DRYING GAS CHARGED EXPANSION VALVES

No. 6 of a Series

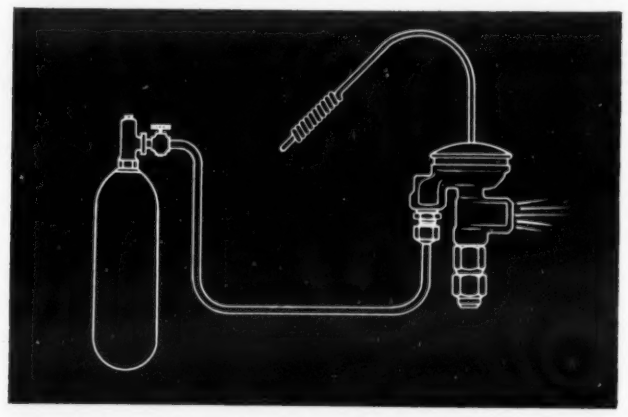
Moisture in a refrigeration system often accumulates in the expansion valves causing freeze ups which put the system out of operation.

After the system is thoroughly dried, it may be necessary or desirable to disconnect the expansion valve and dry it separately. Moisture may so permeate the valve as to make it impossible to dry it by ordinary means.

Detailed here are four effective methods of drying "Detroit" Gas Charged Expansion Valves No. 673 and 674; 893 and 894; 896 and 897; 899, 786, 787 and 788. Procedures for drying other type "Detroit" valves will be taken up in subsequent data sheets.

***Method No. 1*—Methyl Alcohol and Refrigerant**

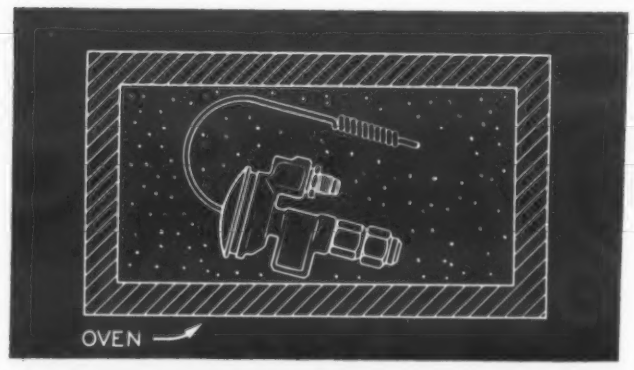
Hold the valve with the *outlet connection* upright so you can pour methyl alcohol into it. Pour until the alcohol runs



through the valve and out the inlet connection. Cap connections with fingertips and shake well. Then drain the methyl alcohol from the valve. Repeat this operation several times and finally connect the valve to a Freon or methyl chloride gas line. Use plenty of gas and blow the valve out thoroughly. This is a very convenient method, and one of the most effective.

***Method No. 2*—Atmospheric Oven (3 Hours)**

Use of this method demands an oven in which the temperature can be closely regulated. Any type oven will do, but temperature regulation is absolutely essential to avoid damaging the valve.



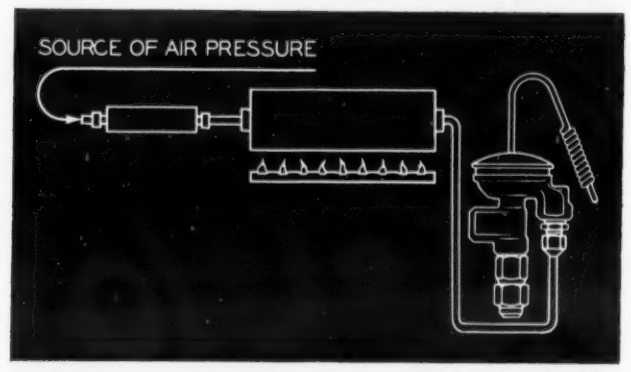
a. "Detroit" Gas Charged Valves having maximum pressures of 20 psi or less can be dehydrated at 220°F.

b. "Detroit" Gas Charged Valves having maximum pressures greater than 20 psi can be dehydrated at 160°F. Bake for 3 hours, making sure temperature does not rise above indicated limit. Install or cap as soon as the valve can be handled to avoid entry of moisture from the air.

***Method No. 3*—Heated Dry Air (30 Minutes)**

All "Detroit" Gas Charged Valves may be dehydrated by this method. Air temperature should be limited to 160°F maximum. Pressure on valve should not exceed 50 psi.

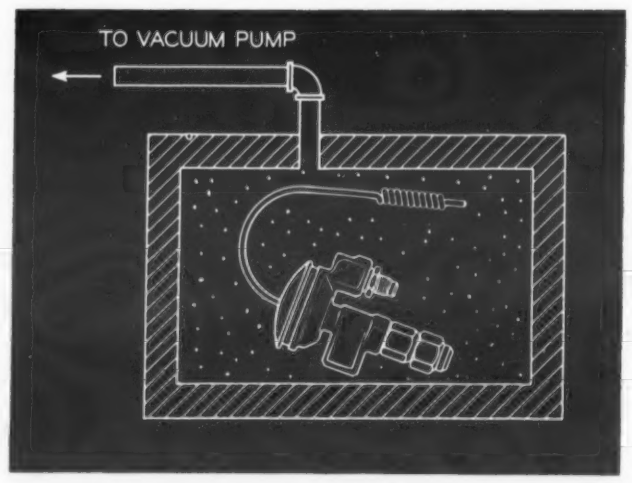
Required is a source of air under pressure, a dehydrating cartridge, and a tank for heating the air. Blow hot air through until the valve is thoroughly warm.



(This method of dehydration is completely described in Sheet No. 4 of this series.)

***Method No. 4*—Heat and Vacuum Oven (3 Hours)**

Required is a temperature regulated oven, strong and tight enough to hold a vacuum of 26" to 27" mercury without collapsing or leaking air, and a good vacuum pump.



Place valve in oven, heat to 160°F maximum. Start the vacuum pump and hold under heat and vacuum for at least 3 hours.

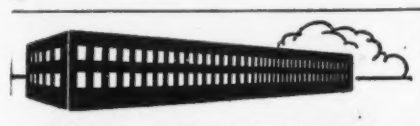
Reprints of these articles, punched to fit your service book, available on request. Write for your copy.

DETROIT LUBRICATOR COMPANY Division of American Radiator & Standard Sanitary CORPORATION

DETROIT LUBRICATOR COMPANY

General Offices: 5900 TRUMBULL AVENUE, DETROIT 8, MICHIGAN
Division of American Radiator & Standard Sanitary CORPORATION
Canadian Representatives — RAILWAY AND ENGINEERING SPECIALTIES LIMITED, MONTREAL, TORONTO, WINNIPEG

"DL" Heating and Refrigeration Controls • Engine Safety Controls • Safety Float Valves and Oil Burner Accessories • "Detroit" Expansion Valves and Refrigeration Accessories • Stationary and Locomotive Lubricators



WAR INDUSTRIES NEED REFRIGERATION

The use of refrigeration in industry has been greatly accelerated by the war. In peacetime this expansion may logically be expected to continue. Write for literature.

GENERAL REFRIGERATION DIVISION

Yates American Machine Co. Beloit, Wis.

Sales Manager Wanted

THE MAN WE WANT is now probably a top-grade salesman, or assistant sales manager, in the "tools of air conditioning" field—blowers, air washers, heaters, coils, etc. A man who feels he's now "ready to go places" with a leading manufacturer of air conditioning equipment.

THIS IS A REAL JOB—with an excellent future—for the right man. Ability to direct national dealer sales, plan sales campaigns, handle administrative functions, is necessary.

WRITE US IN DETAIL, giving age, background and experience, and salary desired. Arrangements will be made for personal interview.

Box 1801, Air Conditioning & Refrigeration News

3 New Appliances Announced by Norge

(Concluded from Page 1)

Capacities to be 6 cu. ft, 11, 18½, and 26. Chest-type, lift lid construction. Modernly styled with white exteriors to blend with other appliances.

3. Automatic cycle washer. Design and features are such as to lead company officials into the belief it is likely to open up an entirely new segment of the field for this type product, according to Mr. O'Harra. Fully automatic in operation. Exterior dimensions standard.

An unpredictably high demand is anticipated for the portable water cooler, according to Mr. O'Harra. "Never before has the average home owner been able to purchase a small, electric water cooler which can be carried from room to room and used on the sun porch, in the den, in the playroom, or elsewhere in the house. Neither has the businessman with a small staff of 10 persons or less, or the executive who needs such a cooler for general use in his private office and in the conference room.

"We also foresee demand from hospitals for rental to patients, thus providing better care and saving much of the nurse's time which would be spent in getting cold water for patients.

"Hotels, and clubs, too, may find it desirable to have these coolers available for rental to guests."

The cooler is approximately 22 in. wide, 13 in. high, and 12 in. deep. It can be carried easily by the average individual. The water compartment is styled to hold a one-gallon bottle, or can be filled from a pitcher. With full one-gallon water bottles weighing only 9 pounds, they can be handled easily by the average housewife or office worker, Mr. O'Harra pointed out. However, the cooler is so designed that five-gallon bottles may be used if this is desirable. A cup dispenser is attached to the front of the cabinet.

The freezers are to be offered in a variety of sizes "in order to meet the specific needs of the consumer," Mr. O'Harra explained. "Some," he said, "will want the 6-cu. ft., single compartment unit for the city and suburban home." This freezer is intended, fundamentally, for storage but will freeze foods satisfactorily. A ⅛-hp. hermetic motor-compressor unit will provide power.

Those who intend to process foods from their own garden probably will be interested in the next largest, or 11-ft. cabinet, Mr. O'Harra stated. This model, powered by a ¼-hp. motor-compressor, has a large storage space with a separate freezing section, while compartments have individual lift lids equipped with a locking device.

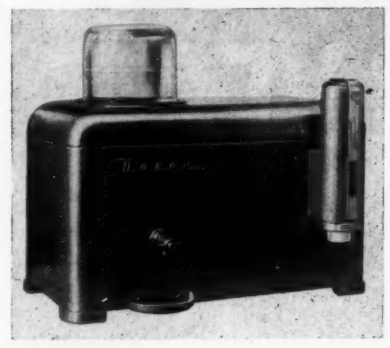
The 18½-cu. ft. freezer will hold more than 500 pounds of frozen food and is intended for large-scale gardeners. It will have two large food storage compartments and a separate freezing space, each of which is covered by a locking lift-lid. It will be powered with a ⅓-hp. unit. The freezer will be small enough to be carried through a 30-inch door.

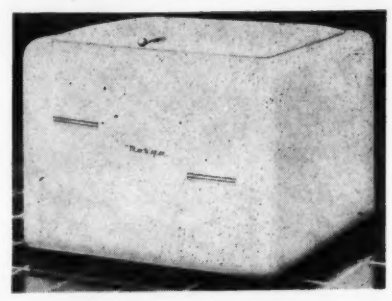
Norge will round out this line with a 26-cu. ft. home and farm freezer for farmers and suburbanites who want to process and store food for off seasons. It will be a three-lid, three-compartment model, providing 20½ feet of space for storing and 5½ for freezing. A ½-hp. heavy duty power unit will be used.

Mr. O'Harra said the company was not in a position to reveal operating or engineering details of the automatic cycle washer at this time.

"However," he explained, "we think we have a product that will go far beyond anything that has been offered to date. Several of its main features will be exclusive with Norge and should satisfy the demands of many who want that 'extra something' in a device of this type." From the standpoint of exterior, the washer is of dimensions that will permit its installation in the average kitchen in harmony with other appliances. Finish will be white.

Portable Water Cooler Heads List of New Norge Products





At top left is the new portable electric drinking water cooler announced by Norge, the first of its type ever marketed, the company claims. It measures 22 in. by 13 in. by 12 in. and can be easily carried, Norge says. (Lower left) This is one of the four models of home and farm freezers which Norge has designed. (Right) This automatic cycle washer is also new to the Norge line. Its dimensions will permit installation in the average kitchen, the company says.

Pre-War Refrigerator Manufacturers

who used PANELYTE *laminated plastic parts*

★ AMANA SOCIETY
★ AMERICAN
★ ARTIC-ELECTROLUX
★ BOHN
★ COOLERATOR
★ CROSLEY
★ FRIGIDAIRE
★ GIBSON
★ GLOEKLER
★ HALL
★ HEINTZ & MUNCHAUSER
★ HERRICK
★ C. V. HILL
★ ICE COOLING
★ KELVINATOR
★ McCALL
★ MONITOR PROCESS
★ MONTGOMERY WARD
★ NORGE
★ PHILCO
★ RANNEY
★ REX
★ SANITARY
★ SEARS ROEBUCK
★ SEEGER-SUNBEAM
★ SERVEL
★ S. I. A. M.
★ SPARKS-WITHINGTON
★ STEWART-WARNER
★ VERING
★ VICTOR PRODUCTS
★ WESTINGHOUSE

This list is printed to indicate the length and breath of our experience with the refrigeration industry. Additions to our extensive pre-war facilities are in progress.

We are ready and eager to work now on designing and development work . . . to give you the benefits of our long and comprehensive experience . . . to prepare for the mass-production of Panelyte molded shapes and fabricated parts to meet your requirements.

PANELYTE *the structural plastic*

PANELYTE DIVISION
ST. REGIS PAPER COMPANY
230 PARK AVENUE
NEW YORK 17, N. Y.

Sales Offices: Atlanta, Boston, Chicago, Cincinnati, Cleveland, Dallas, Denver, Detroit, Kansas City, Los Angeles, Nashville, New Orleans, Phoenix, Portland, St. Louis, St. Paul, San Francisco, Seattle, Syracuse, Trenton: Buenos Aires, Johannesburg, Mexico City, Montreal, Sao Paulo, Toronto, Vancouver.

★ RECORD MAKER IN DESIGN, DEVELOPMENT AND MASS PRODUCTION OF STRUCTURAL RESINOUS LAMINATED PARTS FOR THE REFRIGERATOR INDUSTRY

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AGENTS FOR KINETIC'S "FREON-11," "FREON-12" AND FREON-22"

Courses for Training of New Salesmen Prepared for Industry by E.E.I. Group

NEW YORK CITY—A program designed to offer courses in instruction for the sale of service by electric utilities, electrical manufacturers, wholesalers, and dealers, and embracing specific problems encountered in the residential, commercial, industrial, and rural fields has been recently announced by the Edison Electric Institute.

For salesmen who contemplate training in any of these selling branches, the company offers a combined course of 18 lessons. In the first eight of these, general principles of selling are stressed, with emphasis on the causes and effects of selling, the logical development of the sales technique, the allocation of selling time, and the customer's viewpoint in respect to successful sale.

These basic principles are then developed in relation to specific product or service sales. In the residential field, the course consists of four lessons which deal with the sale of appliances in general, and which discuss the selling method with particular regard to refrigerators, electric ranges, water heaters, and the home laundry.

The commercial sales course gives specific instruction in four lessons concerning store lighting, school and office lighting, commercial cooking, and miscellaneous motor applications.

In the training course for industrial representatives, the eight basic-principle lessons are synthesized in what the company calls its leader's manual. This text, which was developed by the Industrial Power Committee of the institute, is recognized by power engineers as a fundamental lesson guide in the field.

Those prospective salesmen interested in the rural field are given, in addition to the basic general instruction, a two-lesson course applying the general selling technique to problems of farm electrification.

After making an intensive study of agencies qualified to produce the course as designed, the Sales Training Committee of the Institute, with M. R. Rodger of Middle West Service Co., Chicago, as chairman, appointed the Vocafilm Corp. to prepare complete lessons.

During the war, Vocafilm has produced training films for the Army and Navy. In preparation for the Institute's project, the corporation has surveyed the requirements of the electrical industry and has drafted outlines of the proposed courses, which have been analyzed and corrected by the Institute committee.

It was stated that the program will be completed by the end of the year, and will be available then.

Each training meeting has been organized to include a sound slide film which will dramatize the sales training. Prospective salesmen thus will be shown visually the correct and incorrect methods of selling, and technique refresher presentations also can be made.

With each sound slide film is included a silent trailer film, which points up important facts developed by the sound story, and which is intended to stimulate discussion and analysis in the classes.

In addition to the texts provided for each classification of training, a Leader's Manual is offered for the course instructor. The manual suggests a complete, detailed outline for each meeting of the course.

Also developed by the Institute is a Salesman's Manual, which correlates the training offered in the meetings, and is designed to serve as a complete reference and textbook.

Cost of the eight lesson basic training program has been announced as $200 for the entire set of material to be used by the leader. This includes the sound slide film, trailer films, and leader's manual.

The set of eight salesmens manuals is listed at $5 per man.

Charges for the special courses are as follows:

Residential	$100
Manuals	$4 per set per man
Commercial	$100
Manuals	$4 per set per man
Rural	$ 50
Manuals	$1 per set per man

The industrial course offers only a sales instructor's guide at $1.50, with the currently available power sales manual to be used as a textbook in conjunction with the guide.

Railroad Salvage Co. Named by Admiral

ASHEVILLE, N. C. — Railroad Salvage Co. will handle the Admiral line of appliances when they are again available. They will also stock ranges, refrigerators, and General Electric radios.

J. L. Hugard Establishes Firm in S. Gate, California

SOUTH GATE, Calif. — J. L. Hugard has published a certificate that he is conducting an electronic and refrigeration service business under the firm name of Electro-Mech, at 9516 Long Beach Blvd., South Gate, Calif.

Consolidated Mfg. Now Monitor Distributor

DAYTON, Ohio—A new division of the Consolidated Mfg. Co. to be known as the Consolidated Monitor Home Appliances Co. has been announced by Granville Class, recently named director of the Monitor Equipment Corp. in New York.

Headquarters of the new firm will be established here and in Cincinnati for the distribution of Monitor home appliances.

Display room and warehousing facilities will be housed in the firm's present plant here.

Harry W. Shelby has been appointed vice president in charge of sales for Consolidated Monitor.

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try ***VISOLEAK*** *today*

Peerless Producing Refrigeration Coils, Condensers and Expansion Valves

MARION, Ind.—Peerless of America is now engaged in putting all its productive facilities here into production on refrigeration and air conditioning coils and various other items of refrigeration equipment.

During the war the Peerless company was engaged 100% in production of items for the military, having produced more than 6 million shells, and other items such as oxygen regulators, air diluters, and gasoline segregators. All war contracts have been terminated.

For many months, however, Peerless engineers and production men have been active in redesigning old products, and in experimental work on new products. Some production lines were also started for civilian products.

Peerless is now in production on the following refrigeration products which it made before the war: the 3-inch fin coil, flash cooler, finned and plain cube maker, capacity booster, Thermek coils, and expansion valves.

New products now being readied for production include new-type unit coolers, wall-type blowers, dome-type blowers, a new kind of expansion valve, and a new kind of cold plate.

Peerless has also developed a new air-cooled condenser, which it is now producing on a large scale for original equipment manufacturers only. A special conveyor-type production line was set up to produce these condensers.

Other items in the process of development at Peerless will be announced at a later date, but it is very unlikely that a line of household refrigerators will be among the new products that Peerless will introduce.

The Peerless general sales office will be located in the company's Chicago office at 333 N. Michigan Ave., and will be headed by M. W. Knight, assistant to the president and general sales manager. Walter A. Honeychurch will be factory sales manager, handling all orders and contact with the plant operation at Marion.

New Laboratory Can Test Any Type Product

The Peerless engineering department now has a completely equipped testing laboratory in which the engineers will be able to test any piece of cooling, heating, or air treating equipment of their own or their customers' design.

Within the test laboratory is a testing room insulated with 8 inches of foamglass. An "ante room" provides access to this room from the laboratory, and there are cold storage doors leading directly to the plant aisleway by means of which large equipment can be brought into the special room.

On one side of the insulated test room, within the laboratory, is an office housing the instruments, recorders, controls, and tools and a workbench.

On the other side of the test room is a machinery room, in which is installed a 3-hp. condensing unit for air conditioning the test room, a 5-hp. condensing unit for operating cooling devices on test, an air compressor for automatic air-operated controls, a water supply tank and filter and softener, and water heating and cooling apparatus.

The control panel in the office part of the laboratory permit the automatic control and recording of all tests. Powers Regulator Co. controllers, connected to a special filtered air supply, operate dampers and valves.

One controller regulates dampers which direct air in the test room's air conditioning equipment to be heated, cooled, or by-passed. This controller has wet and dry temperature bulks in the room, and controls the humidity by connection to a steam valve in the machinery room. This method of control permits constant use of both cooling and heating units located in the conditioner, and avoids delays and variations in the room temperature.

A similar type of air-operated proportional controller provides a steady water supply for tests of drinking water coolers, condensers, and air conditioners.

Two air-operated thermostats provide throttling and a top temperature limit on the steam heating used for test room air, and the water supply. Gauges show steam and water

Where Peerless Will Test Refrigeration Items

W. J. Bolton (left) is director of the Peerless of America testing laboratory, working under the general direction of Joe Askin (right), chief engineer. These men are shown with the equipment just outside of the test room on which results of the tests are recorded. At the end of the counter top in front of Mr. Askin is an electric heat type refrigeration calorimeter.

pressure, and head and back-pressure of the refrigeration system in conditioning the test room. Along the bottom of the board are "air switches" which enable the operator to do things manually which the controllers do automatically.

With these devices it is possible to have the test room at any temperature from below zero to high heats, at a constant temperature, for if the cooling apparatus tends to lower the temperature while being tested, the exact amount of heat is automatically applied, and vice versa as the occasion demands.

On the other side of the control board, the "results" show up. Two water flow meters, connected from the test room, measures water entering the apparatus, and water coming from a test job, and the water comes out of spouts over a drain basin under the control board where the flowmeters can be checked by weight or measurement. Here also are a voltmeter with six-position switch to connect it to various phases and voltages, and wattmeters for different voltage currents of one or three phase.

Also on this panel is the new Brown Instrument Co. electronic potentiometer, which records on a paper belt each of six temperatures measured by the thermocouple method. The six thermocouple leads can be located anywhere and attached to anything in the test room. Next to this is a two-pen continuous pressure recorder with connections for equipment in the test room.

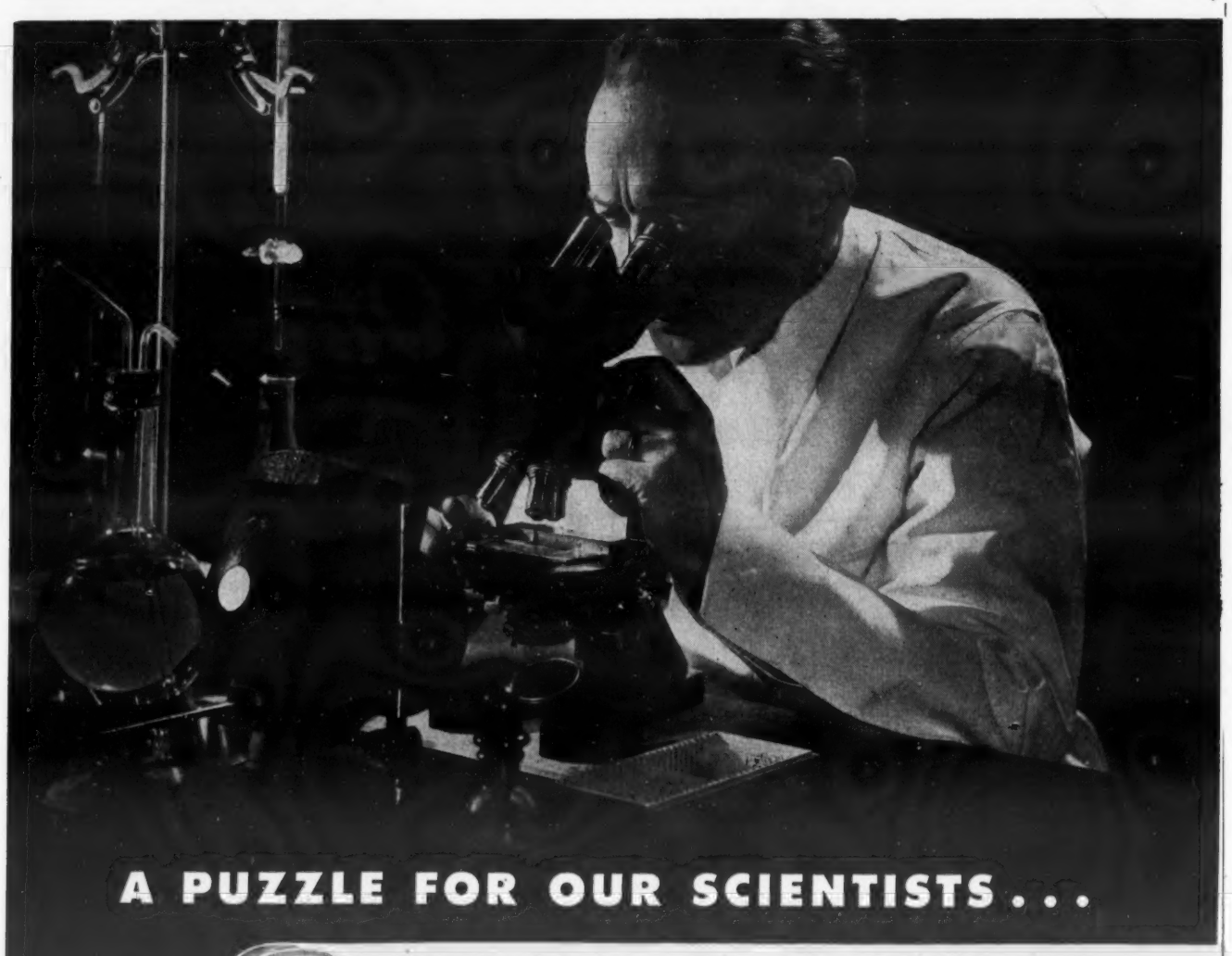
On the counter below the recording panels is an electric refrigeration calorimeter, a device for measuring cooling capacity of all kinds of refrigeration equipment. It operates on the principle of exactly matching the amount of electric heat to offset a cooling capacity under test.

Other equipment in the laboratory includes a vacuum pump for drawing air out of test apparatus, precision thermometers, anemometers and a velometer, a Strobotac for measuring speeds and studying moving objects, r.p.m. counters, pressure gauges, draft gauges, electrical resistance meters, high-potential breakdown tester, chemical "smoke" for studying air currents, and electrical timers.

W. J. Bolton, director of the laboratory working under the direction of Joe Askin, chief engineer, has been active in the low-pressure refrigeration industry since 1924. He was educated at Bucknell university and Carnegie Institute of Technology, and after leaving school became one of the early Frigidaire dealers.

In the next 10 years he worked for various commercial refrigeration distributors and as a refrigeration contractor.

He joined Uniflow Mfg. Co. in 1935 as chief engineer, where he engineered water cooling equipment and developed the Kold-Draft line of beer cooling systems. In 1941 he became chief engineer of Sunroc Refrigeration Co., manufacturer of water coolers. He has been with Peerless since 1944 as a developmental engineer.



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EXPERIENCE . . . QUALITY . . . SERVICE—that's what you get when you let Union Steel Products work with you on shelving for your post-war models. Our men have had years of experience in design and manufacture . . . our plant has every needed facility to turn out attractive, strong and correctly designed shelves and baskets. Let us suggest ways to turn out better shelving at lower costs. Available only in lots of 1000 and over. Write for our new brochure on Refrigerator Shelving.

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Dealers Who Sold War Substitute Lines Think They May Continue Them Now

WASHINGTON, D. C.—A survey conducted among two dozen representative electrical distributors and dealers here to determine their attitude towards handling substitute lines postwar reveals no very definite pattern. It does, however, reveal a very definite desire to continue and generally increase their facilities for the sale of electrical appliances.

Of the nine distributors interviewed, five had taken on one or more new lines, and these will continue to handle them postwar.

Some lines quite foreign to the usual inventory of an electrical distributor were discovered. For example, one distributor took on a line of distilled spirits—known to the public as whiskey—and he seems to be well enough pleased with the results to continue handling it.

Another took on a nationally advertised brand of floor mops, polishes, and accessories and is now the sole distributor for the line in this territory. So pleased with the results obtained from handling this entirely non-electric line, is this distributor, that he will continue to handle it. Rapid turnover, absence of service, and supplying large important customers are among the desirable features, according to the manager of this distributing organization.

What might be termed the "old line" distributors, long time handlers of nationally known lines, seem not to have found it necessary to take on substitute lines and will, therefore, continue as before when electrical merchandise again becomes available.

The magnitude of government business in this locality has been a determining factor in maintaining a satisfactory volume of business during the war.

One such distributor ran into so much government business involving over-seas shipment that he organized an expert packing department where equipment was packed according to Army and Navy specifications, not only for their own and other manufacturers' orders, but frequently for other local firms who wanted to make use of their packing facilities.

So complex are the requirements of Navy Department specifications for overseas packing, it frequently happens that the cost of packing nearly equals or sometimes exceeds the cost of the equipment. No trouble, apparently, was experienced in obtaining lumber for the packing as it was procured through government priorities.

PACKING FOR NAVY

An interesting fact developed by the Navy during the period of vast overseas shipments, is that packing for export shipment by manufacturers, who have been doing this according to what they thought was first-class procedure, has proved utterly inadequate due to the rough handling the equipment gets from service forces personnel. This fact is verified by photographs of equipment taken at overseas destinations now in Navy Department files.

Another distributor took on a line of toys and reports such good results that he will handle them in a separate department while continuing to distribute a well-known line of electrical merchandise.

One distributor expressed the opinion that only about one third of the dealers would retain substitute lines postwar which checks quite closely with the results of this survey. He feels that items like paint would be kept whereas items like hobby horses would be discarded.

Of the dealers interviewed, about one half took on one or more new lines, and about one third expect to continue selling them after electrical merchandise again becomes available.

Among the substitute lines taken on by these dealers are a wide variety of commodities, such as jewelry, handbags, furniture, cutlery, mops, floor and furniture polishes, toys, phonograph records, and sporting goods.

From the foregoing, it will be seen the majority of dealers will return to the fold of straight electrical merchandising even though they have made a good profit in handling substitute lines.

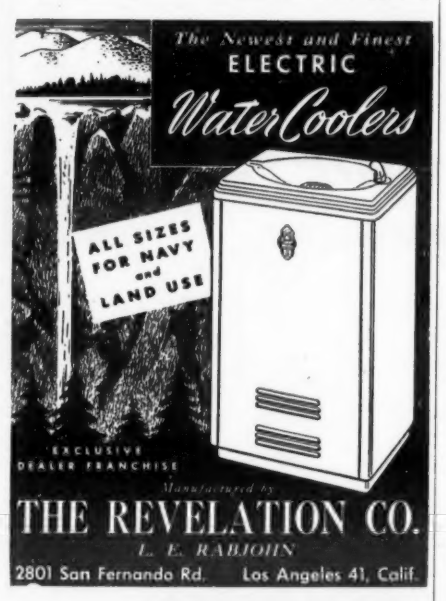
One case was cited of a dealer who took on a line of toys, has already made a good profit on the transaction, and expects to close out his present stock at auction.

EMPHASIZED SERVICE

As is generally known, most electrical dealers, particularly those handling refrigeration, have been devoting a major portion of their time and attention to service, and have not had to resort to substitute lines. Some of them are making more money on repairs than they made on the sale of merchandise. Here too, though, it seems as if many of them have become tired of the troubles encountered in trying to make an old appliance work and prefer to return to the more clean cut operation of selling new merchandise.

One prominent dealer interviewed seems to express the very general sentiment of this type of dealer when he said, "I have not taken on any new or substitute lines, I have been in business here for many years, have built up a good reputation among an excellent clientele, and I am not going to jeopardize that reputation by taking on any new and untried lines, whose performance I know nothing about." He has been employing three service men as compared with one man before the war, and will continue to service appliances.

Another prominent dealer said he had not taken on any new lines because of the difficulty of obtaining sales help and the small profit in handling substitute lines. This particular dealer has a cottage on Chesapeake Bay and, due to his wide acquaintance among hunters and fishermen, expects to devote a portion of the basement of his store to a sporting goods department, handling outboard motors and accessories.



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Be sure of handling the best locker . . . A-S-E. It's America's luxury locker . . . preferred the nation over.
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Locker Storage
Meat Storage
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Widespread Sales of Frozen Meat Viewed As Revolution In Distribution of Meat

Popularity of Home Freezers Cited by Packers as Key to Frozen Meat's Future

CHICAGO—General sale of beef, lamb, pork, and other meat products in frozen form is deemed a revolution in the distribution of meat, according to a recent survey reported by *The Wall Street Journal.*

Although this is not a new idea—it was unsuccessfully attempted some 15 years ago—meat packers believe that this time it will make progress, since new and improved home freezers will provide for home storage of frozen meats at the desired temperature of zero.

PROSPECTS LOOK GOOD

When interviewed as to the probable success of the venture, one official of a packing house said: "If you had asked me about frozen meat prospects three years ago, I would have said the chances of this product getting some place were about zero. I've changed my mind, mainly because of the interest the home freezer industry is building for this way of selling in general."

"If the refrigerator manufacturers do what they say, it will be hard to buy a unit without a home freezer compartment, which will provide the zero temperature necessary for the home storage of frozen meat," comments another meat packer.

Proper aging of meat done by packers before freezing to provide tender steaks and chops, "spring lamb" throughout the year, and less waste per pound are claimed as consumer benefits from the frozen meat era by *The Wall Street Journal* article.

An ordinary sirloin steak, the beef expert at one meat plant test kitchen explained, should be cut into two or three parts for correct cooking, since the tenderloin needs less broiling time than the tough "tail." This could readily be done with frozen meat.

EXPECT STABILIZATION

Considerable stabilization of the packing industry will result if the frozen meat project makes a hit with the consumer. Fluctuating prices, which result in inventory losses, are brought about by the spoilage of meat under the present system of unfrozen distribution.

The use of frozen meat would enable packers to continue to take animals in quantity when range and other conditions encourage heavy marketings. The meat could then be sold in periods when animal supplies are smaller, the article goes on to say.

Caution is the watchword of meat packers in approaching this new field, however. One packing company, endeavoring to promote frozen meat 15 years ago, took a loss of $1,000,000. In 1938 a Chicago packer lost $40,000 in a smaller venture along this line.

Packers are waiting for the public to manifest the initial demand, it is stated. One packer's comment was: "We still have much to learn. When more technical men are available, we'll try to find out more about just how frozen meat should be cooked, what freezing does to nutritional values, and how long frozen meat will keep."

WAITING ON FUTURE

The abnormal supply-demand situation of today, meat men point out, would not enable them to prove much about consumer acceptance, even if experiments could be conducted now.

Experience gained with frozen boneless beef for the Army is one factor that has improved the outlook on frozen meat in the past three years. The Army has found that frozen boned beef takes about 60% less shipping space, and boning done at the packing house means a decrease in wasted meat by 10% per steer.

Since Army boneless beef is packed in three varieties (50% for roasts and steaks, 25% for stews and pot roasts, and the balance ground and shaped into loaves for hamburgers and meat loaf), there is no longer a legitimate gripe that one person is served the chuck while his neighbor gets the tenderloin, it was stated.

Present day quick freezing at temperatures as low as -50° gives better freezing results and better taste quality to the food than the slow freezing method at temperatures of about -20° employed 15 years ago.

Other progress has been made in packaging methods and materials, making it possible to seal moisture in, so the meat can't dry out or shrink. Such improvements, when fully realized by consumers, will speed the popularity of frozen meat.

There is disagreement as to the cost of meat in frozen form. Estimates range from about the same as fresh meat to 15% higher. Some packers believe that the added cost of freezing will be offset by better use of fat and bones, plus greater efficiency by the use of power tools for meat cutting.

OPPOSED BY LABOR

Organized labor, which fought distribution of frozen meat 15 years ago, still puts forth its objections.

Earl W. Jimerson, president of the Amalgamated Meat Cutters and Butcher Workmen of North America (A.F.L.) is on record as saying: "We are against frozen meat and also self-service cases for fresh meat, because it curtails employment of butchers."

If all meats were cut and prepared at the packing house, he estimates that the number of butchers employed would be reduced by 65 to 70%.

An example cited by *The Wall Street Journal* to back up Mr. Jimerson's statement was that of a retail store in Pekin, Ill., which had its meat pre-cut and then installed self-service cases. Thereafter two butchers coould do the work formerly requiring six.

Frozen Foods Planned By British Airlines

LONDON, England—British Overseas Airways Corp. has reported that plans for postwar development of their service facilities will include the use of quick-freezing apparatus to assure the provision of fresh foods for their passengers.

Company terminals in London and at overseas stations will be fitted out with low-temperature equipment, and pre-cooked quick-frozen meals will be taken aboard outgoing air liners, to be stored in insulated containers.

After defrosting and heating, these complete fresh-food meals will be served to passengers, even on such long-route flights as that to Australia, the company explained.

Because of weight and space considerations, installation of a mechanically operated low temperature cabinet cannot be made in the plane. The B.O.A.C. is confident, however, that properly insulated containers will preserve the food in good condition for journeys of several day's duration.

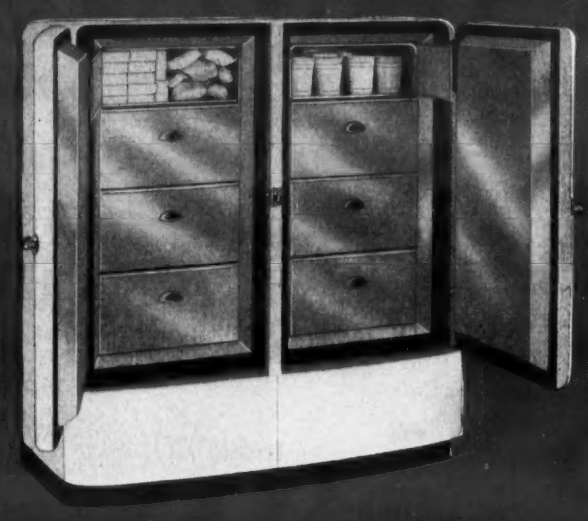
Turkey Processing Plant Started by Swift & Co.

FRESNO, Calif.—A new turkey processing plant will be established by Swift & Co., meat packers, at 725 "P" St. here, in a building leased from the Fresno Consumers Ice Co., it was announced by R. R. Reesman, formerly a member of the dairy and poultry department in the Swift Chicago office, who will be manager of the Fresno plant.

Adjoining the dressing and processing plant, Swift will build a modern turkey hatchery. The project has been approved by the War Production Board and construction will begin as soon as contracts are awarded.

Thousands have said:

"This is the home freezer we want"



16 cu. ft. Drawer Type FREEZ-ALL

16 cu. ft. Model, doors closed

8 cu. ft. Drawer Type

8 cu. ft.—Door closed

FREEZ-ALL home freezers

WILL BE *Easier* TO SELL!

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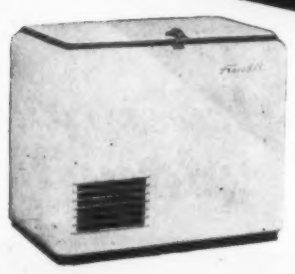

The FREEZ-ALL 6 cu. ft. Chest Type without drawers. Lower in price.

FREEZ-ALL

The original drawer type freezer

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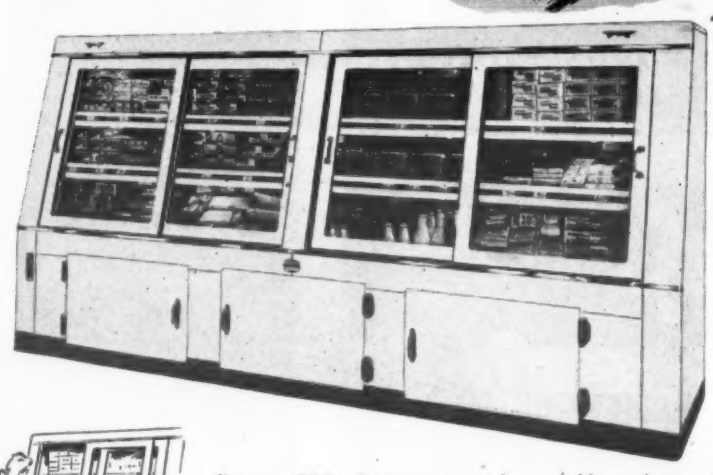
"WHEN I OPEN MY OWN Self-Service STORE IT'S SHERER EQUIPMENT I WANT!"

"Before I went into service I saw what a great job Sherer Equipment was doing in the market where I worked. Made up my mind that my own self-service store after the war would be Sherer equipped . . . and that's for sure!" Sherer distributors have a wonderful equipment story for men like this . . . a story that means **VOLUME** and **PROFITABLE SALES!**



VEGETAIRES . . . DAIRY CASES . . . REACH-IN REFRIGERATORS . . . WALK-IN COOLING ROOMS . . . MEAT & DELICATESSEN DISPLAY CASES . . . FREEZERS . . . all will be included in the Sherer franchise.

Serve-self food stores must have self-service produce and dairy displays to get maximum volume and profit . . . commercial refrigeration dealers must have them to sell.

Smart are the distributors who have planned to go ahead with Sherer. They know that Sherer self-serve display and storage cases for produce and dairy products are the best to be had—designed for the job, efficient in performance, economical in operation. For *bigger* and *better* business, your customers will favor the Sherer line!

SHERER

REFRIGERATOR PRODUCTS

SHERER-GILLETT CO., Marshall, Mich.

Retailers Insist Price Program Impossible Under Present Rules

WASHINGTON, D. C.—Summary of retailers' objections to the cost-absorption policy adopted by OPA for the reconversion was presented to Chester Bowles, OPA administrator, and 35 of his associates at a recent meeting with Retail Reconversion Pricing Task Committee (reported briefly in the Sept. 3 issue of AIR CONDITIONING & REFRIGERATION NEWS).

The following is a more complete report of the committee, of which 29 members were present at the meeting, which had enlisted the services of Dr. Jules Bachman, of the New York University School of Commerce and Martin R. Gainsborough, Chief Economist, for National Industrial Conference Board for the committee, to spearhead the compilation of the report.

Summarizing the report, which consisted of a 120-page pamphlet and was compiled and printed in 21 days, the committee offered the following conclusions:

"The committee unanimously submits this report as a fair and completely factual analysis of the problems faced by distributors during the transition period.

"In view of these findings the committee advises that it cannot accept the tentative cost absorption proposals advanced by OPA at the meeting of July 25, 1945.

"Further, it is the considered and unanimous opinion of the committee that it is not possible to recommend a practicable, reasonable, and economic pricing program within the framework outlined in Executive Order 9599, issued Aug. 18, 1945.

"The committee believes that the ending of the Japanese war makes the July 25 position of OPA untenable. It is necessary for OPA to make immediate plans for major policy changes that will contribute to rapid reconversion and maximum re-employment.

"Specifically, the committee recommends:

"1. The adoption of a broad and realistic decontrol policy to be applied to non-essentials.

"2. The immediate discontinuance of the MAP program.

"3. Immediate abandonment of all pricing techniques based on the use of industry wide averages.

"4. Economic pricing at all levels that will assure maximum production and distribution.

"During hostilities retailers accepted cost absorption as a necessary war-time measure with the specific assurance that this device would not be extended beyond a narrow list of low priced essential items. Absorption is uneconomical, unsound, and inequitable. It has no place in a peace-time competitive economy."

Mr. Bowles, who was present throughout the conference, congratulated the committee on the thoroughness with which the report has been prepared, said OPA would study it and promised an answer within a week.

In answer to point No. 1 in the committee's recommendations, Mr. Bowles intimated that OPA was considering relaxing price controls on a number of items, but he gave no hint as to what they were or when they would be divulged.

It is felt that OPA will defend its stand on the basic policy of requiring the distribution trades to absorb the price increases, and unofficial reports from OPA indicate that there is little hope that the MAP (Manufacturers Average Price) program will be dropped in the near future. It appears that the use of the industry wide average is the only method that appears to be feasible without running into administration tangles.

Brown Instrument To Have Swedish Office

STOCKHOLM, Sweden — Sigfried A. Olsen, Jr., has been named industrial manager here for the Brown Instrument Co., Philadelphia division of Minneapolis-Honeywell Regulator Co.

Mr. Olson has been New York sales engineer for the Brown company for the past nine years. He will report at Stockholm upon completion of necessary transportation clearance.

'Paying Guide' To Form Part of Expanded Credit Service For Members of Rema

PITTSBURGH—Plans for an expanded credit service for members of Refrigeration Equipment Manufacturers Association were outlined at the Association's recent board of directors meeting in Marinette, Wis. by F. K. Zimmerman, chairman of the credit committee.

One of the new elements in the plan is a proposal for producing a "paying guide," which will provide a history of the activities of the accounts which Rema members sell. This paying guide is to be produced in the office of R. Kennedy Hanson, Rema executive secretary.

The Rema credit service program, in which the "paying guide" will be incorporated, is in principle as follows:

1. Nine monthly clearances of the same nature as Rema, has. These clearances include the high credit, amount owing, amount past due, terms of sale, and pay habit for those selling agencies whose names are suggested by the membership.

2. Two semi-annual clearances of all manufacturers, jobbers, distributors, dealers, installation contractors, and exporters as to high credit in the prior six months, pay habit, and tabulation of type of distributor. The names of Rema members sales outlets are to be listed according to states and cities, and will include all those requested by a sufficient number of members to give significant results.

3. Eleven monthly meetings of credit managers. At nine of these meetings the monthly clearances will be the basis for discussion; at the others the guide will be reviewed.

4. Eventually, approval of the directors will be asked to circulate questionnaires to the names listed in the paying guide with the purpose of seeking financial and other information necessary to granting credit.

New Philco Plant For Radios To Claim 'Longest Line'

PHILADELPHIA — Construction has been started on a new Philco Corp. plant here which will have the longest continuous radio production lines in the world, announces John Ballantyne, president.

"The new plant will contain 300,000 square feet of floor space, will cost upwards of a million dollars, and will provide eight parallel conveyor lines for high-speed manufacture of console radios and radio-phonographs," Mr. Ballantyne stated.

It will cover the entire block from Westmoreland to Ontario at C St. and will adjoin the main Philco plants.

"Philco engineers have designed many new features for this plant, which will include three floors and a mezzanine," Mr. Ballantyne pointed out. "All materials will flow into special receiving and inspection areas on the first floor. Production will start on mechanically conveyorized moving assembly lines at the north end of the building on the third floor.

"Completed chassis will be assembled with cabinets and such parts as record-changers on moving lines which extend for about 500 feet along the second floor. Finished consoles and radio-phonographs will be loaded on freight cars at a siding beside the north end of the second floor."

A novel U-shaped pattern for the flow of production through the top two floors of the new plant will make possible continuous movement of materials through the various assembly operations. Testing and inspection will be streamlined, with such features as a central "cage" for piping test signals of various frequencies, AM and FM, to positions along the production lines. New test equipment contains improvements developed by Philco engineers who did wartime radar research.

Announcing the New BENDIX Automatic Home Ironer!

Note the unusually wide clearance between shoe and roll—the Bakelite work table—and the *three* accessible open ends of shoe and roll.

HERE it is—the new Bendix automatic Home Ironer. It's all you'd expect from the people, who pioneered and perfected the marvelous Bendix automatic Home Laundry. And it's destined for an equally eager response from the public, because it is equally deserving of being preferred.

Three usable open "ends"! Here is the *only* ironer with three open "ends"—two usable open ends on the shoe, one on the roll. It's easy to use, and the variety of garments it accommodates is actually multiplied. On *this* ironer, you can really iron a shirt or press a suit.

It's easier to Use! Unique under-the-roll shoe means greater flexibility; wider usefulness; simpler, speedier operation. Adjustable for both leg clearance and knee controls. Fits the operator—she doesn't have to cramp herself to fit the ironer. Series of features include dual thermostat controls, dual speeds, illuminated control indicators, perfectly placed Bakelite work table. "Learning how" is child's play. It's easy to use and free from needless effort or fatigue.

Perfect Visibility! Only with the under-the-roll shoe, can the operator see so well what she is doing. Additional advantages make visibility unequalled. At a touch, the correctly located shoe opens to a clearance of *four inches!* Controls for motor, heat and temperature are all illuminated. Every thing is convenient to sight and touch.

Ninety-nine out of a hundred women say, "We want an ironer that's *easy to use—that irons everything!*" The Bendix is precisely that kind of an ironer. You'll want to see it—if for no other reason than to keep abreast of the best. Here it is—and it's a *Bendix!*

More women want to own the Bendix automatic Home Laundry, than any other "washer." Now you can team this washday miracle up with the one-and-only Bendix automatic Home Ironer—for double sales! For further information on the amazing new ironer, phone your distributor, or write direct to Bendix Home Appliances, Inc., South Bend, Indiana.

BENDIX automatic Home Ironer

BENDIX HOME APPLIANCES, INC., SOUTH BEND, INDIANA . . . PIONEERS AND PERFECTORS OF THE AUTOMATIC "WASHER."

Relaxing of Controls on Instalment Sales As Goods Return Urged by Bank Executive

NEW YORK CITY — Belief that Federal Reserve Regulation W, restricting consumer credit, should be gradually relaxed in relation to the production of consumer durable goods, and the availability of labor and materials for home repairs, was expressed here by Carl M. Flora, vice president of First Wisconsin National Bank, Milwaukee, and chairman of the consumer credit committee of the American Bankers Association.

Immediate modification of the regulation to prevent "undue hardships to veterans" also was advocated by Mr. Flora, who said numerous instances have been reported where returning veterans have been prevented from securing necessary credit for their rehabilitation in civilian life.

ASKS COMPLETE ABOLITION

Complete abolition of the regulation should be demanded, he said, as soon as production of consumer durable goods is sufficient to meet demand.

Asserting that "bankers are deeply conscious of the dangers of inflation in the years following the war," he outlined the selective credit control policy of the consumer credit committee of the American Bankers Association as follows:

"We recognize our responsibility to help combat inflation and believe that consumer credit, if properly used, can be an effective weapon in this fight. Money and liquid assets of individuals are in excess of $100,000,000,000. Obviously, a great inflationary pressure is created by this backlog of buying power and the tremendous pent-up demand for consumer durable goods. We believe this trend can be most effectively met by a program of continued savings by the American people.

"The 80,000,000 holders of war bonds have acquired the savings habit and have accumulated the largest sum of personal liquid assets in the history of this country. We, as bankers, should encourage this trend, and urge people to keep their war bonds as 'nest egg' savings. If people buy automobiles, refrigerators, and radios, and improve their homes out of current income by making use of bank credit, then one of our greatest inflationary dangers will have been averted.

"Therefore, we believe that it is the responsibility of bankers to persuade our people to keep their E bonds until maturity, and to buy necessary goods out of current income, for cash or on prudently budgeted instalment terms.

"Numerous surveys show that a substantial percentage of people intend to keep their bonds. If the credit terms required by regulation, however, are too severe to permit families in the middle or lower income brackets to make such purchases, either a hardship will be worked on those people, including veterans, or they will have to redeem their E bonds.

"If a continued savings program to combat inflation is to be successful, then practical, realistic policies must be followed on selective credit controls. People with substantial war savings, or those few who are willing to cash their war bonds, should not be favored in the distribution of goods over veterans and the lower income group.

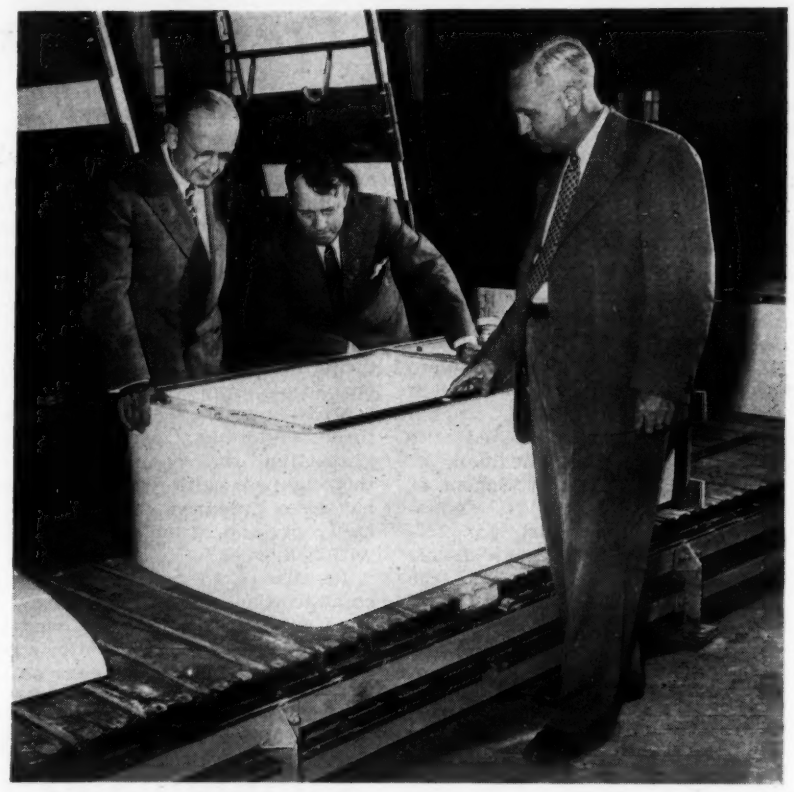
"I believe that Regulation W should be gradually relaxed in relation to the production of consumer durable goods, and the availability of labor and materials for home repairs. It should immediately be modified to prevent undue hardship to veterans. The emergency for which the regulation was created will cease to exist when production of consumer durable goods is sufficient to meet the demand, and it should then be eliminated."

RAPS CONTINUED CONTROL

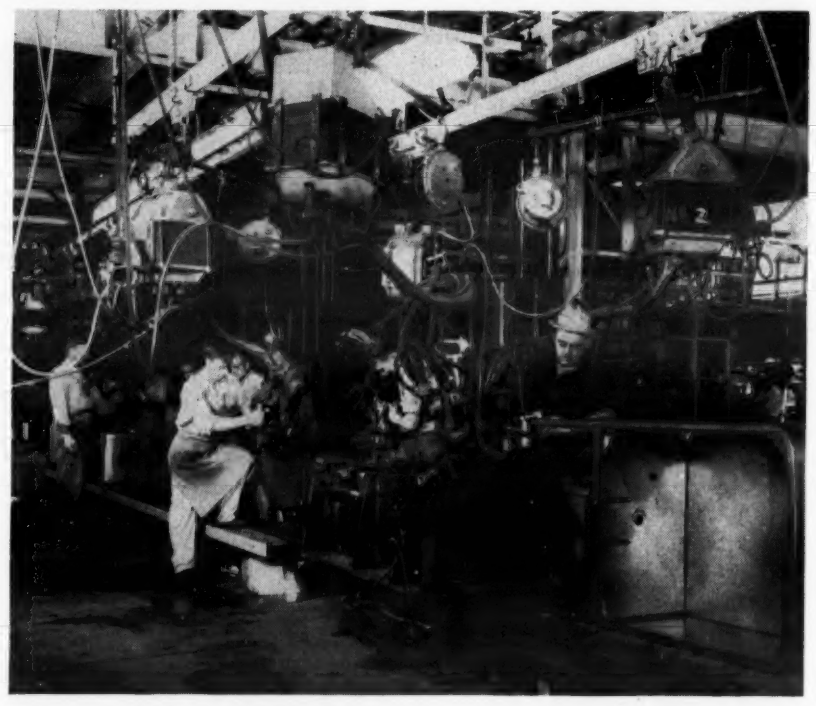
Noting the possibility that legislation may be sought to give the executive branch of the government permanent peacetime power to control consumer credit, Mr. Flora quoted Representative J. Percy Priest of Tennessee as saying that "some time within the next few months Congress will be asked for legislation to perpetuate forever the war emergency power of the Federal Reserve System to regulate credit terms."

"The average man's capital is his character and credit," Mr. Flora said, "and a minute control by regulation of anything as localized and highly personal as credit would result in regimentation of the individual. If such legislation is introduced, labor, business, and banking should form a united front against it."

Kelvinator Shifts Assembly to Grand Rapids

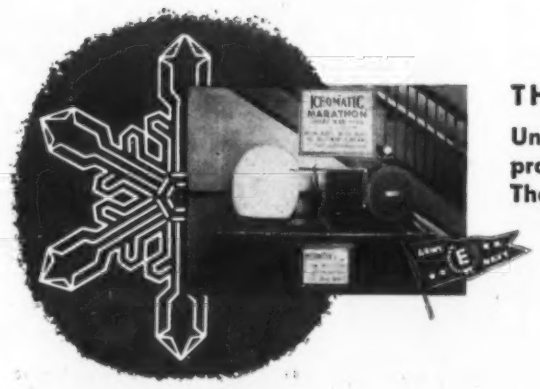


Preparing for the largest appliance production program in its history, Nash-Kelvinator is shifting final assembly of refrigerators from Detroit to Grand Rapids, Mich. An assembly operation on 1946 models is being checked in the Grand Rapids plant by (left to right) R. A. DeVlieg, vice president in charge of manufacturing; C. T. Lawson, vice president in charge of sales; and Dr. L. A. Philipp, chief engineer.



First refrigerator shells begin to come off sub-assembly lines at Kelvinator's plant in Grand Rapids.

WIL
ICE-O-MATIC
REFRI
Manufactur
experiment.
build soundly
their *compressor*
For nearly 20 ye
have been proving the
exclusive oil rectifier and pos
have assured economy, efficiency,
63 sizes and styles, in capacities from ¼ to 5 h.p., have covered all temperature requirements.
New Ice-O-Matic units will be available as fast as conditions permit. If you are planning to buy your units, we invite you to write for further information. Address inquiries to WILLIAMS OIL-O-MATIC DIVISION, Eureka Vacuum Cleaner Company, Bloomington, Illinois.



THEY SAW WHAT THEY WANTED
Uncle Sam's war technicians, looking for proven mass-precision facilities visited Williams. They saw what they wanted in this Marathon Ice-O-Matic unit that has run continuously for 17 years and is still going strong.

Gas Industry Starts National 'CP' Drive

NEW YORK CITY—In a joint promotional enterprise directed toward the nearly 12,000,000 replacement prospects in the American gas range market, gas utilities and 20 manufacturers of ranges who build to "CP" standards have launched a nation-wide advertising and promotional program designed specifically to help dealers.

According to the announcement made by James I. Gorton, Association of Gas Appliances & Equipment Manufacturers and "CP" promotional director, the program calls for a new sales kit for dealers which will be available early in September.

The kit will include descriptions of the industry's complete promotional program, window and floor display suggestions, salesmen training guides, and other selective promotional material for the use of dealers.

All industry-wide material will be supplemented by individual programs produced by each of the 20 "CP" manufacturers.

Crosley Plans New Washers After Jan. 1

CINCINNATI — A new line of Crosley washers will be on the market soon after Jan. 1, 1946, according to J. H. Rasmussen, general sales manager of Crosley Corp.'s manufacturing division.

The first two basic models will be in the medium price range, he has revealed. Later additions of pumps to both models, and of a gas engine to the lower priced model, will make five different types of washers possible.

Tool and die requirements are considerable, Mr. Rasmussen has explained, and tool deliveries alone may not come through before December or January. But if materials continue to be available, samples should be in distributors' hands before the end of January, and stock deliveries in February.

From the long range viewpoint, Mr. Rasmussen believes, the advantage of having new and distinctive models to sell more than outweighs the sacrifice of the first few months' deliveries.

LARKIN
REFRIGERATION PRODUCTS
Humi-Temp Forced Convection Units—Patented CROSS-FIN-COILS—Zinc Fused Steel Plate Coils—Disseminator
See Your Jobber or Write Direct
Pans—Heat Exchangers—Evaporative Condensers—Instantaneous Water Coolers—Bare Tube Coils
LARKIN COILS,
519 Memorial Drive., S.E., Atlanta, Ga.

Today's Appliance Consumers Know What They Want and What They Expect to Pay

And They Want Plenty, This National Survey Shows

PHILADELPHIA — Better than two out of three families interviewed in a recent national survey are planning, within the next two years, to buy one or more new appliances for their homes.

Members of the survey personnel, sent out by the Curtis Publishing Co. (the *Saturday Evening Post, Ladies' Home Journal, Country Gentleman*), personally contacted 4,007 families in 118 large cities, and talked with them about their buying intentions as to home appliances, equipment, and furnishings. (The survey's figures on air conditioning appeared in the Aug. 27 issue of the NEWS.)

Although 93% of the families now own household appliances of some kind, 67.3% are potential buyers of one or more new appliances, the survey figures showed.

Most of the family heads interviewed were serious and definite about their plans. They will do their buying as soon as possible. Between 50% and 78% will purchase the appliances they mentioned within two years after these become available (see Table I).

The other 32.7% were not sure when they would buy, but they knew what they wanted and indicated they were going to wait until the appliances became available before charting what they would buy first. This group will be the target for the aggressive selling and advertising that already are getting under way.

The purchasing intent for specific types of appliances varies widely according to income, the survey revealed. The most immediate market for the newer appliances—home freezers, automatic clothes washers, and dishwashers—will be found within the higher income groups.

The market pattern for these specialty lines apparently is going to follow that originally set by refrigerators, radios, and vacuum cleaners when they first appeared.

The prices people expect to pay are realistic, the survey figures indicate. The extremes of high and low cost on any one appliance generally were held within practical margins. They varied between the different income groups only in the degree that the different models themselves will vary as to price.

People in the lower income brackets were, in general, more uncertain about their plans to buy, and as to when they hoped to buy. These are represented in the 23.1% of the 4,007 families who weren't sure how much they could plan to spend on the total of appliances they plan to buy (see Table II).

On the question of how much they intend to spend altogether, the amount quoted by the greatest single group—15.4% of the whole—was between $300 and $500.

Irons and toasters are the appliances most immediately needed, but refrigerators, ranges, and clothes washers, all major appliances, are on the greatest number of lists (see Table I).

As indicated by the high demand figure in spite of the fact that nine out of 10 families already own appliances of one sort or another, a large body of the market will be replacement sales.

Small appliances wear out more quickly. The high percentage of sales indicated for vacuum cleaners, irons, and toasters is understandable—these are natural replacement items. The high figures indicated for refrigerators, ranges, and radios are a tribute to the effective promotion job done by manufacturers and merchandisers alike throughout the war.

Radios with phonographs, food mixers, home freezers, and automatic clothes washers, ironers, and dishwashers, all relatively new, have the greatest relative sales futures among families who are not present owners of these appliances, the survey shows.

The greatest number among the families interviewed (25.5%) expect to buy a new refrigerator. Electric refrigerators were preferred by 87.0% in this survey, gas by 10.0%, with the rest scattered.

Considerably more than half of the expected purchases will be replacement business, although the median age of the boxes now owned was less than 10 years.

Since the cost levels for electric refrigerators were well established before the war, and postwar prices will continue to be controlled proportionate to those prewar figures, the variation in what people expected to pay for their refrigerators was not a matter of confusion or uncertainty so much as merely the price differences between different models. The range of these estimates ran as follows:

Under $100	2.2%
$100-$149	10.7%
$150-$199	24.4%
$200-$299	27.7%
$300 and over	5.8%
Don't know	29.2%

Median: $196

A new cooking range was down on the lists of 21.5%. Almost two thirds will be replacement customers. Forty-seven percent will buy gas ranges, 45% electric. The median ages of their present stoves: 12 years. The median figure they expect to pay: $155.

The figures on clothes washers are divided between the traditional and the automatic types, 15.2% and 10.8%, respectively. A few, oddly enough, said they would buy both. The median ages: 12 and 9 years. The median price figures: $111 and $176.

Radios similarly are split up into those without phonographs incorporated, and those with. The market for the two types was almost identical: 14.4% without, 14.5% with. This appliance had the highest percentage of present owners: 95.3%.

As with the clothes washer market, the older type presents a greater replacement market, the newer type a new market. The median ages of those owned: eight years and four years, respectively. The anticipated investments: $93 and $170.

Home freezers were spoken for by 10.3% of the 4,007 families. Only a few now own one: 1.2%. And only one in 10 of these plans to replace them with new ones. The market thus promises to be about 99% new buyers. The average price they expect to pay is $217.

Ironers will be bought by 8.6%, the survey indicates. Only one family in 10 now owns an automatic ironer, and these are sufficiently new that only one in 25 will buy them as a replacement item. Their median age: 12 years. The anticipated price: $95.

Lowest item among the major appliances was the automatic dishwasher. Only 1.3% of the families polled now own one, and only one in 10 of these are buying to replace their present one. The market thus is primarily new buyers, planning to pay a median figure of $126.

Table I: How 4,007 Families Plan to Buy:

	Estimated Cost	How Many Will Buy	Within 2 Years
Refrigerators	$196	25.5%	64.1%
Ranges	155	21.5%	57.8%
Washers (regular)	111	15.2%	68.2%
Radio with	170	14.5%	63.9%
Radio without	93	14.4%	65.0%
Washers (automatic)	176	10.8%	69.0%
Home freezers	217	10.3%	55.7%
Ironers	95	8.6%	64.8%
Dishwashers	126	4.1%	48.9%
Vacuum cleaners	80	21.7%	68.6%
Irons	9	16.0%	81.3%
Toasters	12	15.9%	81.4%
Food mixers	25	14.7%	69.5%

Table II: Estimated Amounts Intended for All the Appliances Wanted by Each Family:

Intended Outlay	Percentage of 4,007 Families
Under $50	9.9%
$50-$99	8.0%
$100-$149	8.1%
$150-$199	10.4%
$200-$249	9.1%
$250-$299	5.4%
$300-$499	15.4%
$500-$999	9.5%
$1,000 and over	1.1%
Don't know	23.1%

Median: $211 per family.

STERLING
REFRIGO GEL

The name to remember when specifying dehydrator refills

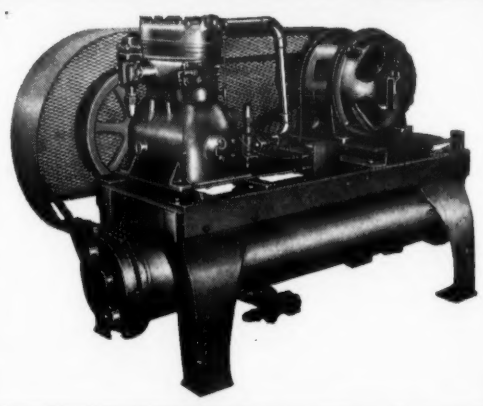
Inert, compact, efficient Silica Gel has almost completely replaced former more bulky materials as a drying agent for refrigerants. Because of its uniformity, high quality and long term dependability, Sterling Refrigo Gel is becoming increasingly recognized as a superior Silica Gel product for the exacting needs of the refrigeration industry. Especially processed from selected raw materials, Refrigo Gel maintains its uniform crystal size without powdering or caking. The entire pore surface is directed to the task of moisture absorption, blocking the possibility of channeling by the refrigerant. Remember this name, Sterling Refrigo Gel, when ordering factory-charged dehydrators or bulk refills from your jobber.

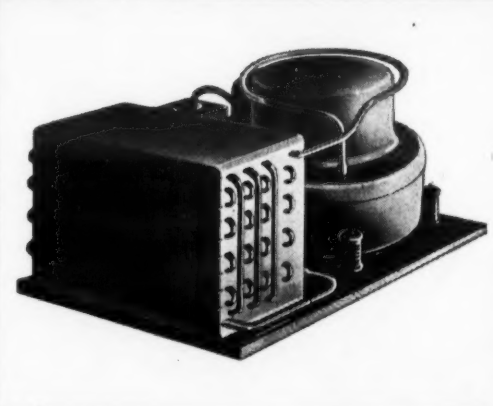
REFRIGO GEL
ADVANTAGES
Inert—no chemical reaction.
Uniform—no channeling.
Dustless—no clogging of screens
Tested—Designed, processed and tested for refrigerant dehydration.
Double duty—absorbs moisture, prevents corrosion.
Universal—effective with all types of refrigerants.

Inquiries invited from distributors and jobbers

STERLING
REFRIGO GEL

STERLING SILICA GEL COMPANY • STERLING, ILLINOIS


UNIVERSAL COOLER
OPEN TYPE


UNIVERSAL COOLER
SEALED HERMETIC

You're Looking at the
REFRIGERATION POWER
Behind the *Frosted Foods* Idea

From food processing plants to the home . . . and in the intermediate locker plants, warehouses, trucks, planes and stores . . . frozen foods will demand dependable refrigerating power.

Universal Cooler, with a quarter century's refrigeration experience to guide its enthusiasm for this young giant of an industry, is already engineering and testing the *right* refrigerating units to "power the freezing" all along the line of frozen food marketing.

Whether your installation will call for a hermetically sealed unit, open-type self contained, or remote type unit — in any capacity from 1/8 to 20 HP — you will find a precision built, All-Purpose Engineered Universal Cooler condensing unit for the job. Join the ranks of forward-looking frozen food equipment producers, distributors and dealers who are saying . . .

"Let's Buy ~~Ask~~ Universal Cooler"

IT'S AS IMPORTANT TO HOLD AS IT IS TO BUY WAR BONDS

FIGHTS for freedom

UNIVERSAL COOLER
WE SELL TO MANUFACTURERS ONLY
UNIVERSAL COOLER CORPORATION · Automatic Refrigeration since 1922
MARION, OHIO • BRANTFORD, ONTARIO

Whipps to Represent Ranco In Michigan

C. E. WHIPPS

• • •

ANN ARBOR, Mich. — C. E. Whipps, former manager of the order department of Ranco, Inc., has been named to head the company's office here serving the Michigan area.

Simon Distributing Moves

WASHINGTON, D. C.—Simon Distributing Corp., distributor of Hotpoint products, is moving to new and larger quarters at 615 Pennsylvania Ave.

India's Weather Helps Make It Logical Market for Refrigeration

WASHINGTON, D. C. — India would seem to be a logical place to sell refrigeration and air conditioning equipment considering the climate and weather conditions, according to the U. S. Department of Commerce.

Indian imports of refrigerating machinery increased nine times between World War I and 1938, being valued at a little more than $100,000 in 1913-14 and at more than $1,000,000 in 1937-38, it was stated.

United States had from 80% to 90% of the Indian refrigeration equipment business in the last few years before the present war, despite a preferential duty on British goods since 1933. This important participation was possible because of the advancement in refrigeration manufacturing in this country, say Department of Commerce officials.

During the late 1930's, a Swedish compressor-type domestic refrigerator made some headway because of its relatively lower cost and operating expenses and the fact that it was operated on kerosene.

Favorable reactions toward air conditioning equipment were seen as early as 1937, when, after a year of testing, installations were made by several railroads.

Separate statistics have not been compiled showing imports of air conditioning equipment, but it has been estimated that they were valued at about $1,500,000 in 1936 and almost twice that amount in 1937.

Air conditioning by mechanical refrigeration is used by five theaters in the country, two in Bombay and three in Calcutta, but many theaters in north-central India still use ice for cooling.

Official sources report that many theater operators are contemplating the installation of air conditioning equipment when it becomes available, and it is believed that new theaters to be built will have such facilities.

Government interest in procuring equipment for air conditioning many of the buildings in New Delhi was reported before the war. With potential users of the equipment in office buildings, dining rooms, textile mills, and tea and coffee estates, a considerable market may develop along with the establishment of conclusive evidence that the cost of the equipment is justified.

Lester Johnson Joins Maytag Central Co.

DETROIT—Lester F. Johnson has been elected a director and appointed vice president and general manager of Maytag Central Co. here.

For the past three years Mr. Johnson has been a lieutenant commander in the Navy at the Bureau of Aeronautics, Washington, D. C. Previously he had been assistant manager of J. L. Hudson Co.'s electrical appliance department for 10 years and Detroit regional manager for the Maytag Co. for three years.

10-Hp. Unit Needed To Cool 'Trolley'

ATLANTA—Driven by a 10-hp. 600 volt d.c. motor, a Carrier "Freon" compressor is used to supply refrigeration to two roof-mounted conditioners on the air conditioned trolley coach which Georgia Power Co. will put into service here.

Now under construction at the Worcester, Mass., plant of Pullman-Standard Car Mfg. Co., the trackless trolley coach's cooling system will be automatic. The coach driver can use the fans of the air conditioning units to provide ventilation without the use of the refrigeration machinery, according to Henry G. Strong, director of transportation air conditioning sales of Carrier Corp.

Mounted over the roof of the coach, the air conditioning units are held by steel framing which carries the load to the side walls or posts. Cork pads isolate the unit from the frame, and there is no direct contact with the roof at any one point.

The compressor-motor assembly is mounted on a rigid structural steel frame, welded, and attached to the coach underframing members through vibration eliminators. The assembly is protected from splash by a sheet metal housing which covers the bottom and sides.

Air is forced through this enclosure, entering a louvered opening at the motor end and escaping along the sides and at the compressor end. This air flow is set up by the forward motion of the coach.

Ducts passing down both sides of the coach at the ceiling distribute the air through perforations at the rate of 800 cu. ft. per minute, while the fans circulate a total of 2,200 cu. ft. through the coach.

Electric motor requirements for the complete installation include a 10 hp. on the refrigeration compressor, two 1 hp. fans for pulling the air through the refrigeration condensing coils, and two ½-hp. fans for circulating the air through the cooling and dehumidifying coils and filters and for drawing in the outside air.

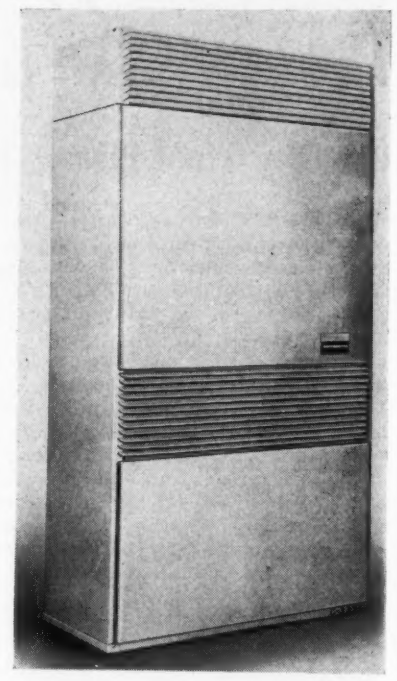
Glue-Glycerine-Water Suggested for Filters

NEW YORK CITY — A glue-glycerine-water solution makes a good moistening material for filter bases such as are used in heating and air conditioning systems, according to research conducted at the laboratories of the Glycerine Producers' Association.

Solutions of 0.2% glue in 50% glycerine are used. This mixture has an advantage over oil-base treatments because dirty and clogged filters can be easily washed clean with cold water and a fresh solution can be applied, the Association claims.

Aside from the elimination of fire hazard, the treatment with the aqueous glycerine-glue mixture is said to be more economical than the throw-away units.

New Worthington Unit



One of the new products scheduled for production in its expanded refrigeration and air conditioning program is the unit air conditioner shown here.

• • •

Worthington Planning New Cooling Lines

HOLYOKE, Mass.—A large part of the heavy ordnance manufacturing facilities of the Worthington Pump & Machinery Corp.'s plant in Holyoke has been converted to production of air conditioning and refrigeration equipment of the latest design. Facilities for the operation have been moved there from the corporation's plant in Harrison.

Engineers are concluding designs for a new line of "Freon-12" refrigerating compressors. Also to be produced at Holyoke will be a line of air handling equipment including air conditioning units, shower condensers, product coolers, and evaporative coolers in a wide range of sizes and capacities.

Sales headquarters will also locate in Holyoke, with W. F. Bishop, assistant manager of the division in charge. The heavy industrial equipment is still being made in Harrison. The company's Air Conditioning and Refrigeration division is under the management of C. E. Wilson, vice president, and M. M. Lawler, manager of the division.

Fred J. Riedel, chief engineer, has installed one of the most complete test laboratories for refrigeration equipment in the country at the Holyoke plant. Assembly line methods have been set up in the same shop where thousands of 90 mm. antiaircraft guns were produced in the early part of the war.

Mr. Riedel will be assisted by J. Neuhoff, engineer in charge of air conditioning units design, and L. J. Hall, engineer in charge of application.

BROTHER... you can't buy it this way!

Before you start figuring on air conditioning—get the *right* kind of advice from *qualified* experts!

Lay your plans for *correct* air conditioning, and make sure your investment will repay you—dollar for dollar—with the "remedy" you expect. By *correct* air conditioning Westinghouse means the scientific blending of correct temperature, humidity, circulation, ventilation and air cleanliness.

Each air conditioning installation—regardless of size or purpose—is an *individual* problem. Consequently, Westinghouse air conditioning equipment is engineered and built to conform with this principle.

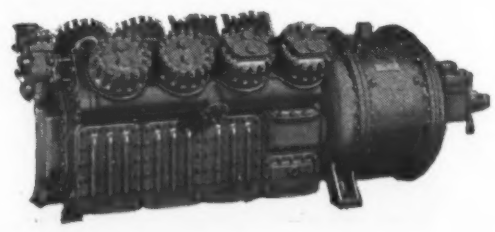
Consider these advantages of Westinghouse *correct* air conditioning: *First*, an air conditioning plant which will provide exactly the conditioned air you want to "live" with. *Second*, an installation which can be depended upon to give continued trouble-free, economical service. *Third*, correctly engineered equipment resulting from Westinghouse know-how.

If you're thinking about air conditioning, send for your copy of "How to Plan Correct Air Conditioning." Call your nearest Westinghouse Office, or write Westinghouse Electric Corporation, 150 Pacific Avenue, Jersey City 4, New Jersey.

The Heart of Correct Air Conditioning

WESTINGHOUSE HERMETICALLY SEALED COMPRESSOR

The entire mechanism of the Westinghouse Hermetically Sealed Compressor—including its motor—is sealed gas-tight. This feature means sealed-in *power and* sealed-out *trouble . . . has been* service-proved *in thousands of Westinghouse installations. Compact and lightweight for easy installation. Low operating costs.*



Westinghouse presents John Charles Thomas — Sunday, 2:30 E.W.T., N.B.C. Tune in Ted Malone, Monday through Friday, 11:45 A.M., E.W.T., Blue Network.

Westinghouse CORRECT Air Conditioning

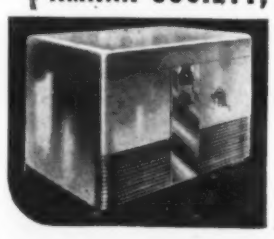
PLANTS IN 25 CITIES OFFICES EVERYWHERE

Amana HOME FREEZERS

Years of experience in building quality low-temperature refrigeration equipment are behind Amana Home Freezers. This means complete owner satisfaction.

AMANA MODEL 200 . . A combination Freezer-Cooler Unit for home or commercial use. Size 8'0" long x 4'0" wide x 6'10" high. It's a large capacity sharp Freezer and Frozen Food Cabinet combined with a Walk-In Cooler. *A complete private locker plant!* Write for information.

REFRIGERATION DIVISION
AMANA SOCIETY, AMANA, IOWA



AMANA MODEL 90

A nine cu. ft. unit for larger families. Exclusive full-opening lid for easy access to all contents. Modern in every detail.

AMANA MODEL 50

A five cu. ft. model for the average home. Beautiful design . . . full opening, counter-balanced lid—all contents easily accessible.

New Mills Direct-Drive Commercial Units Designed to Operate at 1,750 r.p.m.

CHICAGO — Details of its new direct-drive, motor-speed commercial refrigeration compressors have been announced by Mills Industries, Inc., here.

Initial tooling will produce twin cylinder units in the ¼ and ⅓ hp. sizes. The second stage will step up to ½ and ¾ hp., and final plans call for production in sizes ranging from single cylinder 1/12 hp., to six cylinder 5 hp. Standardization of precision parts will make possible the use of modern mass production techniques in the production and assembly of these units.

This new unit is as long a stride forward as the present conventional belted units were over the old slow speed "ice machines," claims Sterling Smith, head of Mills Refrigeration Division.

Belts, flywheels, and pulleys are eliminated. Weight is greatly reduced; and the cubic footage of space required for installation in self-contained fixtures is about one-half of the present requirement for standard belted units, it was said.

For example, a standard ⅓ hp. unit weighs about 120 pounds and requires over 3 cu. ft. of space. Mills direct-drive unit weighs only 72 pounds and will occupy 1.4 cu. ft. of space, the company claims.

These units will be easy to inspect and service. They will run more quietly than the conventional units they replace, and their life will be longer, according to Mills.

The quietness and long life which will be built into these new compressors will be obtained through the use of a new type pressure lubrication system. The oil pump is a precision machined spiral groove cut around the main bearing. This develops an oil pressure of 30 pounds per square inch which delivers oil at the rate of 2 ounces per minute to all parts requiring lubrication.

This direct-drive compressor, as its name signifies, is driven by an electric motor which is assembled directly into the compressor casting with the motor rotor mounted on the compressor shaft. The speed is the same as the speed of the motor—1,750 r.p.m.'s, which is approximately four times as fast as the standard belted type of condensing units.

Inasmuch as these new compressors run four times as fast as the old type machines, the cylinders are only one-fourth as large for the same capacity, making piston speeds therefore approximately the same as conventional units.

Other features include a new Mills shaft seal which is said to give as dependable performance at motor speed as the present seals give with low speed conventional units. Replaceable cylinder sleeves eliminate the "fussy machining" from the cylinder block and make for easier assembly techniques. The cylinder sleeves also aid in standardization by giving a choice of piston sizes for each cylinder block.

A revolutionary type of unloading valve, adding no extra parts, permits the compressor to start under the most adverse conditions of suction and head pressure and also makes possible the use of the unit with any conventional type of low side refrigerant flow control, announced the company.

New Buffalo Firm

BUFFALO—A business name has been filed here for Ed's Refrigeration Service, 562 Winspear, by Edward Orsolits.

Navy Ends Training at York; Forms School At Norfolk Station

NORFOLK, Va.—Establishment of a new refrigeration school at the U. S. Naval Training Station here has ended the activities of York Corp.'s naval training school at York, Pa., where 1,271 men have studied refrigeration and air conditioning during the past four years.

The new school is expected to be in full operation by fall, but it has been operating since February. Some 200 to 300 enlisted trainees will be accommodated and a class will be graduated weekly.

Two courses will be offered. The basic course will cover maintenance, operation, and repair of refrigeration equipment, and will require four weeks. The second course, devoted to air conditioning, is intended for personnel who have completed the first course and will run two weeks.

A similar school is under construction for the Navy at San Diego.

Set up five months before Pearl Harbor, the York school was originally intended to train submarine petty officers in the complex air conditioning equipment needed in submarines. The course was later expanded to include training in all types of shipboard refrigeration and air conditioning equipment and Navy land-based equipment.

In addition to Naval personnel, the York school, headed by Frederic B. Kinley, also instructed officers and enlisted men of Marine Corps and Coast Guard, and some from the Army. Officers of the British Royal Navy and the Brazilian Navy also attended.

In the school's final graduating exercises, W. S. Shipley, chairman of York; S. E. Lauer, president of York; Mr. Kinley; and officers of the Navy participated.

Person Co. Takes Crosley

ROXBORO, N. C.—Person Furniture Co., Inc. has recently been appointed Crosley dealer in this territory. O. O. Reynolds is the manager of the company.

Dupont Plans For Big Expansion In Plastics

WILMINGTON, Del. — E. I. du Pont de Nemours & Co. is exercising options to purchase a site of about 400 acres at Washington, near Parkersburg, W. Va., to provide plant space on which to expand the company's activities in the plastics field, according to Arnold E. Pitcher, general manager of the plastics division.

The Du Pont company already operates one of the largest plastics plants in the country located on a 64-acre site at Arlington, N. J., and a smaller plant at Leominster, Mass. Neither of these locations provides sufficient space to accommodate the expansion in manufacturing facilities which it is now forecast will be required over the next several years, the company said.

Among the first units to be built at the new location will be greatly expanded facilities for manufacturing nylon as a plastic in various forms, "Lucite" methyl methacrylate resin, and the new plastic polythene.

Avoid Moisture Damage in Over-Seas Packages

Simply put a few small bags of Jay Cee Silica Gel, like the ones above, inside your container . . . wrap or seal tightly . . . and ship over-seas without fear of damage from "in-the-package" moisture. Jay Cee Silica Gel is an ideal drying agent . . . has amazing power to absorb atmospheric moisture. Thus the air inside of containers is kept absolutely dry and delicate metal parts are protected from rust and corrosion.

Jay Cee Silica Gel is also used in packages of foods, fabrics, chemicals, and other products. Moreover, it has wide application in the air conditioning, refrigeration, and chemical industries. Jay Cee Silica Gel is clear white; passes a rigid section test; meets exacting Government specifications; is strictly a quality product.

JOBBERS WANTED — There are excellent opportunities for jobbers to build profitable business on Jay Cee Silica Gel in a few territories. Write for details.

JOLIET CHEMICALS, LTD., INDUSTRY AVENUE, JOLIET, ILLINOIS

JAY CEE SILICA GEL

A superior dehydrant

Gilmer BELTS

When you sell Gilmer V-Belts you are selling a line that is made from the largest assortment of V-moulds in the world. There is a Gilmer V-Belt for every air conditioning and refrigeration unit.

And Gilmer V-Belts have all the qualities your customers want—a perfect fit, ruggedness, long life, efficient service. It pays to specialize in Gilmer V-Belts. Get in touch with your jobber today.

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DETROIT PUBLIC LIBRARY

'Discount Selling' Days May Come Again, So A. V. Bice Offers Idea For Combatting It

CINCINNATI — A plan through which distributors can outlaw "back-door" selling of appliances without sacrificing the goodwill gained by extending discount courtesies to important business contacts has been drawn up by Ohio Appliances, Inc., 659 E. Sixth St. here.

Worked out by A. V. Bice, vice president of the company, the plan has been printed in a four-page folder for employes of the home office and its branches in Columbus and Dayton. The company is distributor for Coolerator refrigerators, RCA radio and television, Blackstone laundry equipment, and other household appliance lines.

Wholesalers as a rule readily admit the unfairness of the practice, but most of them feel obligated at various times to sell appliances at wholesale cost when the goodwill of the individual or company buying at discount is of recognized importance to the distributor.

The unfairness of the practice, it has been pointed out, is that the dealer, who has no share in the gain or the goodwill involved, nevertheless loses his profit entirely. More than that, he stands to lose the potential profits he would work toward in future sales to a satisfied customer.

A distributor's business prospers in direct ratio to the success of the dealers he serves, it is Mr. Bice's point. It would be highly inconsistent for him to take part in any transaction that lessens the dealer's profit.

But it goes farther than that, he emphasizes. The distributor's profit and the dealer's profit both are included in the list price of every item of merchandise the distributor gets in. Since he gets the merchandise first, he is in a position to deprive the dealer of his profit in such a way that the dealer has no direct comeback.

Mr. Bice's idea takes both sides into consideration—the distributor's need for periodic gestures of business courtesy, and the dealer's right not to have his profits jeopardized. He has suggested a procedure that will sacrifice neither one.

Suppose a man who can do your distributing outlets a lot of good drops in at your headquarters, picks out a 7-cu. ft. box for his home, identifies himself to the clerk, and adds, "I'd like to buy this from you directly." In other words, at the wholesale figure.

The business of putting across your company's reasons for not wishing to extend discounts is one you wouldn't want to entrust to a clerk. It would be too easy for a lack of tact on his part to alienate goodwill. And yet you, on the other hand, can't be on hand all the time against such an emergency.

Mr. Bice's solution is this: Have your clerk accept the customer's suggestion as if it were nothing out of the way, and say only that discount requests go through the head office for approval. Have him ask the customer for his name and address, and promise that your office will reach him in a few days.

When the details of the request reach your desk, you yourself can mail the customer a courteous letter, and a copy of the pamphlet you prepared for your employes, explaining your company's responsibility to its dealers, and why your selling at cost is unfair to them.

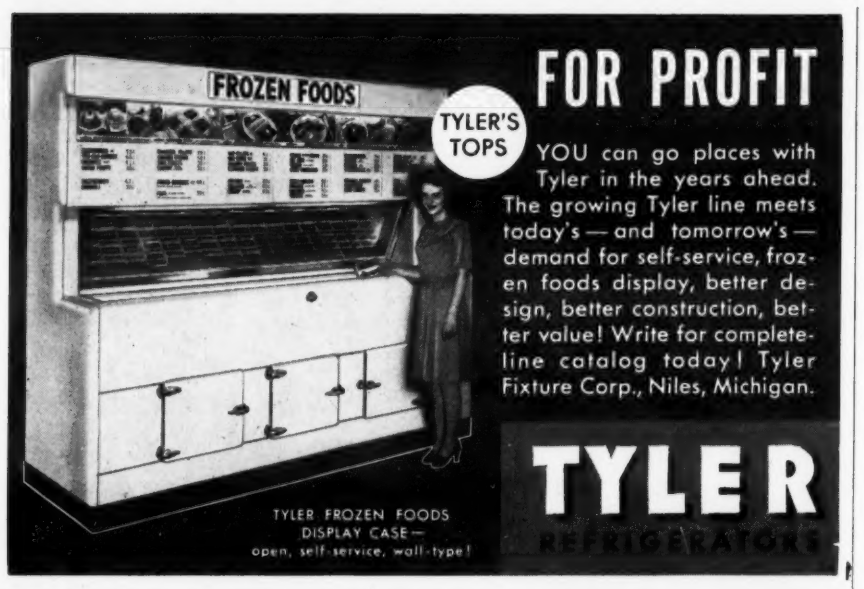
A copy of this letter, sent to whichever of your dealers is closest to the customer, will give the dealer a chance to follow up the customer's expressed desire for the refrigerator he wanted from you.

There are times, of course, when allowing a discount is sound policy, Mr. Bice acknowledges—when the loss of your own profit is of less importance than the goodwill of a customer whose position makes it possible for him to do considerable good for your company.

When that occurs, get in touch with him personally and explain the situation. But he's most certainly entitled to a discount from you, you can say. Ask him to buy the refrigerator from his neighborhood dealer in the regular fashion, and to ask the dealer to call you afterwards.

The dealer will give you the details of the model number, and of anything else the customer bought, and you will send him your check for the amount your company would have made as the wholesaler's profit on those items.

The Ohio Appliance employes all have been given copies of the pamphlet, and the plan has been discussed with the distributor's more important retail accounts. These, and other dealers in Cincinnati, have received the plan enthusiastically.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TYLER'S TOPS
FOR PROFIT
YOU can go places with Tyler in the years ahead. The growing Tyler line meets today's — and tomorrow's — demand for self-service, frozen foods display, better design, better construction, better value! Write for complete-line catalog today! Tyler Fixture Corp., Niles, Michigan.
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TYLER FROZEN FOODS DISPLAY CASE— open, self-service, wall-type!

West Penn Power Returns To Former Policy On Wiring Service For Ranges, Water Heaters

PITTSBURGH — Reinstatement of its prewar policy providing free installation of service wiring, and a flat charge of $7.50 for range or water heater wiring has been announced by the West Penn Power Co., according to William D. Peters, manager of the company's dealer section.

The range and water heater service entrance policy, originally established in 1930 and withdrawn in December of 1942 because of wartime restrictions, remains essentially the same under the terms of its reinstallation, it was reported.

The application of the policy is intended to contribute materially to the expected rapid development of range and water heater markets, as indicated by consumer surveys and manufacturer and dealer plans, said Mr. Peters. The policy originally was instituted after careful study as to the best means of establishing electric cooking in the heart of the natural gas area.

Essentials of the policy statement are as follows:

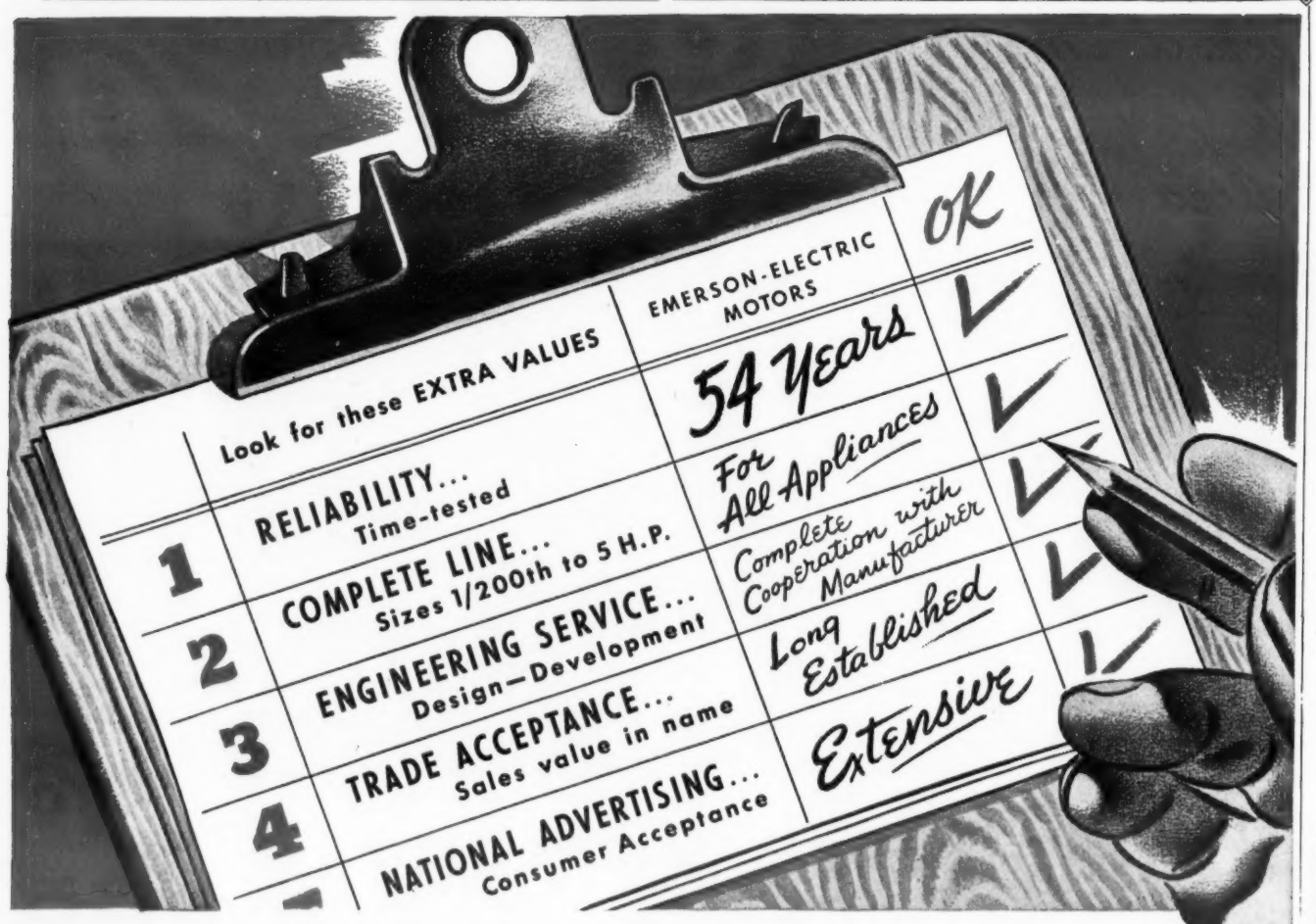
(1) The company will furnish a standard three wire 60 ampere entrance to serve either an approved electric range or water heater which is in regular use, and where suitable facilities have not already been installed.

(2) The company will install a circuit from the entrance to either the range or the water heater for a flat charge of $7.50. (The charge is added to the price of the unit at time of sale.)

(3) The policy is restricted to single or double dwellings.

(4) In case a customer moves, the company provides the entrance facilities at no charge, the customer paying for the circuit, providing the customer moves to either a single or double dwelling. (There is no limit to the number of times entrances are supplied.)

Mr. Peters said that in case of multiple installations, the company would subsidize, on a special negotiation, an apartment house change-over, to the extent it would cost to make an average range installation.



Before You Buy Electric Motors Check These 5 Vital Values

Because a motor is the vital link between product design and product performance, it is always wise to look for the *extra values* back of the motor itself.... Five important background values in Emerson-Electric Motors are high-lighted in the chart above. It will pay you well to investigate them carefully—because, no matter how good your product may be, it is finally no better than the motor that drives it.

ENGINEERING SERVICE—Design—Development.... For years past Emerson-Electric has been closely associated with many manufacturers in the practical development of new motor-driven products. This service is of even greater value today, because it embraces a vastly expanded experience.

INVESTIGATE *the extra values* back of Emerson-Electric Motors. Give your products this *extra sales value.*

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Branches: New York • Chicago • Detroit • Los Angeles • Davenport

Electric motors for Aircraft and power-operated gun turrets are being made by Emerson-Electric for service on all the battle fronts.

Airplane Gun Turret for Army Bomber—one of six types manufactured by Emerson-Electric.

EMERSON ELECTRIC
MOTORS · FANS
APPLIANCES

BEHIND THE SCENE there's a Torrington Air Impeller

AIR IMPELLERS for every purpose

HOME APPLICATIONS
Air Conditioning
Attic Fans
Desk Fans
Evaporative Coolers
Kitchen Ventilators
Furnace Blowers
Home Movie Projectors
Oil Burners
Portable Electric Heaters
Refrigerators
Room Coolers
Space Heaters
Stokers
Window Ventilators

Creation of physical comfort in the average American home usually involves one or more Torrington air impellers. Quiet, troublefree operation leaves the homeowner practically unaware of their presence. Conversely, manufacturers of home equipment which require air movement are very conscious that "TORRINGTON" fans or blower wheels are not only the best but they cost less.

If you need an air impeller in your product, make sure it's a Torrington fan or blower wheel, and you may save time and expense if you consult us while your product is in the early stages of design.

THE TORRINGTON MANUFACTURING COMPANY, TORRINGTON, CONN.

Low War Mortality of San Diego Dealers Cited by Bureau in Advice to Newcomers

Prospects Are Fine, But Not Good Enough To Support 400 More Dealers, Bureau Says

SAN DIEGO, Calif.—San Diego County appliance men see only trouble ahead for most of the 400 people here who have signified their intention of going into the appliance business.

While the county has had an exceptionally high population increase, the Bureau of Radio and Electrical Appliances of San Diego County claims, in a survey, that there has been practically no mortality of the dealers who were in the appliance business before the war.

All or practically all of these firms will resume merchandising the lines they formerly sold as soon as the products are available.

The bureau says it was prompted to make the survey because of the unusual number of people interested in entering the appliance business, which, although promising, has been over-glamourized.

WHY SO MANY?

There are several reasons why this impression has been created by forces largely beyond the control of the industry, according to the bureau.

1. The stop-production orders which came early in the war, made people more conscious than ever before of the desirability of home appliances, because they soon became so difficult to obtain.

2. This back-log of demand has been highly publicized through surveys and featured stories to the point where what may be an unreasonably high per capita appliance purchasing potential has been conceded.

3. The national average of mortality among appliance dealers is known to be high, suggesting to those not in the business that opportunities for profitable entry into this field would be good.

4. The tremendous part "electronics" has played in helping win the war, coupled with the promise of new discoveries, based supposedly on this science, has further tended to glamourize the outlook for the appliance business.

Against a national average of 30 to 40% numerical loss of appliance dealers since the war, most San Diego County firms formerly selling such equipment were able to adjust themselves to other types of merchandise and so have survived.

Actually, the few firms that did go out of business in the San Diego territory were more than replaced by newcomers and by servicing shops that expanded into retailing while stocks were still available, according to the bureau.

The bureau states that the decision to enter the appliance business in San Diego county should be carefully weighed by anyone considering risking capital because of the present strong dealer representation.

CONDITION UNUSUAL

This condition, however, is not found in most territories, and certainly is not general elsewhere in southern California, the bureau believes.

Another important factor, declares the bureau, is that reconversion of industry may be a gradual process, for despite the manufacturers' eagerness to go immediately into full production, they may have to proceed slowly with the result that full production probably won't be achieved until at least six months after the go-ahead.

The bureau expresses the thought that the effect of this initially limited production will be something like this:

Existing dealers will have to be given sharply limited sales quotas until manufacturing volume can be built up. By no stretch of imagination will such quotas be sufficient at the outset to alone maintain these dealerships.

But as already noted, these firms have long since adjusted themselves to other types of merchandising, and a continuation of at least a part of such "foreign" activity will be the rule until appliance production will permit them to get back into the appliance business on a normal basis.

With such a situation facing manufacturers and their distributors, the promiscuous granting of product franchises just isn't being done, according to the bureau.

By encouraging returning servicemen and others to establish appliance stores before it would be possible to furnish them with sufficient stocks to sustain a business, representatives would become largely responsible for their failure and loss of capital, the bureau contends.

Also these manufacturers and distributors have an obligation to stretch the initially small volume of appliances among the dealerships already established.

SOME JUSTIFIED

As already pointed out, despite the conditions described some new additions to the established dealerships can be expected. There are two reasons given by the Bureau of Radio and Electrical Appliances for this position:

1. In a very few places throughout the county, population shifts or territorial adjustments may justify the granting of an additional franchise here and there.

2. Also, it is known that some of the new products which will find their way into the appliance market will not in all cases be sold by existing dealers.

In spite of the enthusiasm shown over the future profit possibilities of appliance retailing, the bureau feels that many people are unduly optimistic over the point of continuing public demand for industry products.

"Everyone concedes that the anticipated 'trickle' production of the first few months will find customers in a scramble to buy," the bureau says, "but what about that day, and it surely will come, when the tremendously expanded manufacturing facilities of the nation catch up with current demand, and appliance sellers will be competing with volume production of everything else people will be urged to buy.

"It is quite likely that we will then find ourselves in a 'buyers' market,' where for the first time in several years, salesmanship and sound merchandising will again become of prime importance."

It is suggested by the bureau that those individuals genuinely interested in the long pull plan to make a connection in a selling capacity with some already established firm at the time appliance selling can be resumed.

A solid experience in selling is going to prove indispensable when the time comes that the products being sold will no longer be taken away but will have to be aggressively sold.

"Also it is our belief that the matter of having knowledge of how to service appliances that we some day may sell from our own stores is important," the bureau survey points out. "This, too, could be gained without risk of one's own capital, while working for or with someone already established."

'Active' Firm Formed

LOS ANGELES — Active Refrigeration Service has been established by John Kiel and George Weigel at 4330 Eagle Rock Blvd., here.

Distributor Will Build $11,000 Display Bldg.

JACKSON, Mich.—Arctic Refrigeration Co. of Lansing has let out contracts to local construction firms to erect an $11,000 modern display and repair building at 2354 W. Main St. here, announces Gunter W. Joseph, owner.

Distributor for C. V. Hill & Co.'s meat cases, walk-in coolers, dairy equipment, frozen food lockers, and allied lines, the Arctic Refrigeration Co. is also an authorized distributor for G-E refrigerators. In its new location the company plans to manufacture new types of home freezers from its own designs.

Established six years ago, the Arctic firm is presently operating at 211 East Shiawassee St.

Miller Named Memphis Frigidaire Dealer

MEMPHIS, Tenn. — Appointment of B. A. Miller Appliance Co., of 1786 Madison St., here, as a Frigidaire dealer for Memphis and Shelby County has been announced by McGregor's, Inc., Frigidaire distributor.

The Miller company, owned and operated by B. A. Miller, will handle and service commercial refrigeration and air conditioning equipment in addition to a complete line of commercial cases for grocers and restaurants and reach-in and walk-in coolers in all sizes. John S. Williams, with 20 years' experience, is in charge of the company's service department.

Service Engineers Should Know . . .

"VIRGINIA" METHYL CHLORIDE IS REALLY LABORATORY TESTED

— the content of each and every container — large or small — is analyzed 3 separate times.

BOILING POINT TEST

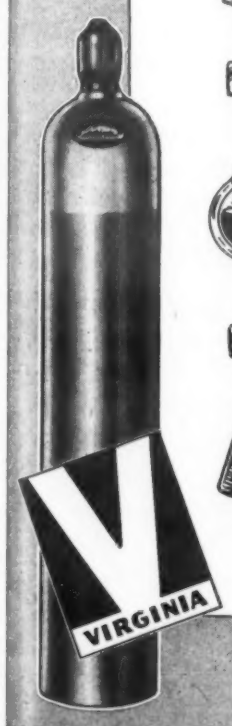
1. A measured sample from each cylinder must be water-white in color and when boiled to dryness must record within 25/100 of 1 degree a constant boiling point of minus 23.8°C. This test detects unwanted hydrocarbons, dirt and oil impurities.

ACIDITY TEST

2. The acid content in a sample of known weight must not exceed 6 parts per million; low acidity prevents copper plating and oil sludging.

MOISTURE TEST

3. The moisture in a sample of known weight must not exceed 80 parts per million; — low moisture prevents freezing at expansion valve and refrigerant break-down.



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Agents for Kinetic's "Freon-12" — "Freon-22" — "Freon-11"

NEWS FOR YOU

We are NOW filling orders for

PEERLESS FLASH TUBE COILS
DE LUXE FLASH COOLERS

The entire refrigeration industry has been waiting for this announcement.

It marks the passing of priorities, delays and disappointments in serving your customers' coil and cooler needs.

Today . . . right now . . . you can place your orders for the famous *Peerless Flash Tube Coils* and *Peerless De Luxe Flash Coolers* and secure prompt delivery. Our fin coil machines are in operation, turning out volume production.

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Send for our new Bulletin No. 100. Bring yourself up-to-date on the exclusive features of *Peerless* coils which have made the name *Peerless* a synonym for *Superior Refrigeration*.

They'll Do It Every Time . . . . By Jimmy Hatlo

WHO MADE THAT DUMMY MANAGER? I'M THE GUY THAT OUGHTA BE RUNNIN' THIS JOINT. I GOT IDEARS! I'D PUT IN A NIFTY LINE OF GOODS AND I'D HAVE 'EM KNOCKING DOWN THE DOORS TO GET IN HERE - YESSIR - KNOCKING DOWN THE DOORS TO GET IN!
MANAGER
UNDERLEIGH NEVER MISSED A CHANCE TO PUT IN A RAP FOR HIS SUPERIOR. HE FIGURED HE WAS BORN TO RUN THE STORE.
Thanx To CURRAN DE BRULER CHICAGO, ILL.
SOMEHOW HE GOT THE JOB - AND SOON THEY WERE KNOCKING DOWN THE DOORS ALL RIGHT, BUT THEY WERE CREDITORS - NOT CUSTOMERS.
JIMMY HATLO
NOTICE OF BANKRUPTCY DISPOSSESSION AND SHERIFF'S SALE
BILLS
MANAGER
BILLS
6-8
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Buy and Buy - - More War Bonds

ARE YOU USING THE

BEST POSSIBLE ALLOY *for* CONNECTING RODS

Engineers of a large refrigeration manufacturer recently completed exhaustive tests on Forged Connecting Rods made from our "600" Metal, with the following actual results:

After more than 400 operating hours, including several hours at extremely low oil levels, these Connecting Rods showed so little wear that it was exceedingly difficult to tell the Rods which had been subjected to the tests from those which had been machined and polished, but never run. In fact, the difference was not apparent to the naked eye, but could be determined only by laboratory test.

Examination of crank shafts showed no signs of wear whatever, thus substantiating our claim that there is no appreciable abrasive action when mating surfaces are smoothly machined.

"600" Bearing Metal is the solution to many difficult bearing problems. It is for the "hard to crack" applications. It can be drawn or forged, and readily fabricated into a great variety of sizes and shapes. It has been successfully used for many years for:

Gears • Gear Blanks • Bushings • Bearing Pins • Connecting Rods • Worm Gears • Cams • Thrust Washers • Propeller Shafts • Drive Shafts • Super-charger Shafts • Truck Transmissions • Drawn Rods • Extruded Shapes • etc., etc., etc.

"600" Metal is approximately three times stronger than the best cast bearing bronzes, and develops a lower temperature under heavier loads and higher speeds. Extreme pressure lubricants do not corrode it.

"600" Bearing Metal has superlative bearing properties, but contains no tin; thus conserving this critical metal for the war effort.

Write us if you have a bearing problem or require complete information.

MUELLER BRASS CO. PORT HURON, MICH.

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AIR CONDITIONING AND REFRIGERATION News

BUSINESS NEWS PUBLISHING COMPANY • 5229 CASS AVENUE, DETROIT 2, MICHIGAN

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F. M. COCKRELL, *Founder*

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The Income Tax Bogey

SOMETIME before long Congress will begin consideration of a new tax bill.

In the meantime it probably would be a good idea for all of us to do a bit of thinking on this most important subject.

Among many widespread misconceptions concerning taxes, perhaps the most erroneous is that corporations can and do pay taxes.

Actually a corporation can not and does not do anything of the kind.

No corporation has any funds out of which, of itself and by itself, it can pay taxes. All it can do is to collect taxes from its customers, and then turn over all or part of the tax it collects to the government.

These taxes are hidden. The purchaser cannot see them; therefore, he has not the slightest idea as to how much of the price he pays represents the actual value of whatever he bought, or as to how much of this retail price goes for taxes.

If some way can be found to get all taxes out in the open, so that the American people can actually see what their individual tax bill really amounts to, then we shall have laid the first brick in the structure of an efficient and economical government.

A short time ago a professional economist made the statement that "an income and excess profits tax on corporations is a subsidy for the inefficient producer."

Offhand, this remark seems to be about as far from the truth as anything could be.

But when his statement is analyzed—keeping in mind that corporations are tax collectors rather than tax-payers—it turns out to be an intriguing statement of fact.

For example, let us take two corporations, both of which are in the same line of business and which are fully competitive—both doing an annual volume of one million.

At the end of the year, when these companies close their books, company A finds that it has a cost of doing business of $900,000; therefore, it must pay income tax on $100,000.

On the other hand, company B finds its cost of doing business amounts to $975,000; therefore has to pay income tax on only $25,000.

Company B, in its selling price which was the same price at which company A sold its products, collected in that selling price exactly the same amount of tax as company A collected; yet it pays income tax on only one fourth as much as does company A.

This means that company B, through poor management or otherwise, dissipated $75,000 of what should have been taxable income.

It also means that, without the subsidy which corporation income taxes provide, company B could not stay in business very long.

If neither company A or B had to pay an income tax, company A would lower its selling price.

And if company B did not meet the new price, its sales would fall off, and it would operate at a loss; or, if it did lower its price it would lose money—and no company can operate at a loss indefinitely.

So, no matter how you look at it, it is the subsidy provided by the income tax which maintains company B as the high-cost producer in any business.

This Tool Box...

CARRIES THE TOOLS THAT KEEP THE NATION'S REFRIGERATING SYSTEMS FUNCTIONING DAY AND NIGHT!

When your Refrigeration Service Engineer calls to check, repair, or maintain your refrigeration equipment, notice what he carries in his big tool box! Among its contents, you'll usually see two "A-P" Controls — one the "A-P TRAP-DRI"— the system protector that traps dirt and moisture. In the other carton is a dependable "A-P" Expansion Valve.

Good, sound experience backs this widespread acceptance of "A-P" Dependable Refrigeration Controls by Refrigeration Service Engineers. With a heavy work load, and short of experienced help, every service call must count. Because "A-P" Refrigeration Controls are so wholly dependable, service engineers know they can install them and forget them.

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All Credit to the outstanding maintenance job Refrigeration Service Engineers are doing today! Count on their continued cooperation — and the always dependable service of "A-P" Controls.

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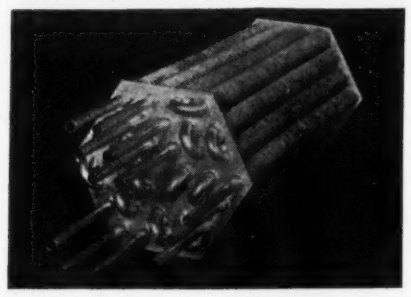
Stocked and Sold by Good Refrigeration Jobbers Everywhere • Recommended and Installed by Leading Refrigeration Service Engineers

ROME-CONDENSER
★ Jointless Type ★



Rome Water Cooled Condenser Coils insure trouble-free condensing equipment. Used by leading compressor manufacturers.

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ROME, N. Y.

Off the Chest

VETERAN MAKES PLANS TO LEARN REPAIR WORK

Costello's Refrigerator Service
Sandusky, Ohio

Editor:

I am writing to you for certain information I would like to obtain. First, I would like a book or manual, catalog, or something, so I can tell one model of refrigerator from another. I want something that will show me a Model C Frigidaire unit. Also K, etc. The same thing with Kelvinator, Norge, etc.

The reason for this is so I can know better how to order parts. Makers will not issue any catalogs at this time.

Second, I would like to spend two months in school this winter, under G.I. Bill of Rights.

I graduated from R.A.C.I. in Chicago in 1937. Would it be possible to go to a manufacturer's school without having connection with a dealer? Would like to learn more on hermetics so I can specialize in their repair after the war.

Would like to know what is wrong with the industry or WPB. Every outfit in town here has air compressors for sale, yet no units or compressors for refrigeration. Something should be done to make compressor bodies and units for replacement at first, even before they make new ones.

If you have available a 1936 Specifications book, send one C.O.D. Will be waiting to hear from you.

Thanking you in advance.

GEORGE COSTELLO

THIS VETERAN AIMS FOR SELLING JOB

7th Div. *U.S.S. Bushnell*
FPO San Francisco, Calif.

Editor:

Have just finished reading your paper of May 7, 1945 and saw where you gave space to a veteran needing a sales job, so am taking the liberty of giving you my trouble too.

Having the required points, I am to be discharged from the Navy within 90 days, and if I can get back to the States quick, I may get out before.

I came into the Navy Dec. 10, 1941, so have just about four years service, and that time has been spent on submarines and submarine tenders, and by work has always been with air conditioning and refrigeration. I fully realize that Navy jobs are different than civilian jobs, but the experience I have gained over this period of time should be valuable to some manufacturer.

Before entering the Navy, I was with the following companies, who, I'm sure, would give me a good recommendation for past performance:

The U. S. Air Compressor Co., Att.: Mr. Ken Clapp, general manager, 5300 Harvard Blvd., Cleveland.

While working for U. S., I covered territory of Indiana, Michigan, Illinois as district sales manager, contacting major oil companies and leading equipment jobbers.

The Graylo Co., Att.: L. L. Gray, president, Minneapolis.

In charge of major oil company sales, eastern United States.

The Lincoln Engineering Co., Att.: Mr. Foster Holmes, president, 5701 Natural Bridge Rd., St. Louis.

Sales and promotion lubricator equipment, throughout U. S.

I was 36 years old this last April, married and have two children, one 17 and one 12.

It is hard to put into words my feelings after having been out of civilian life for four years, but feel sure I can still do a good selling job and want to get started as soon as I get out. At present my home is 36 Kellogg St., Waterbury, Conn.

If I could get with a good manufacturer, where I lived would make no difference. The main thing is this: I want to get started as soon as possible and would prefer factory to distributor.

E. W. DUMLER,
Mach. Mate Refrig. 2/C

INDUSTRY SHOULD BE KEPT INFORMED

Refrigeration and Air Conditioning Contractors Association
Pittsburgh, Pa.

Editor:

Our association would like to take this opportunity to commend you for your splendid article in the July 30 issue concerning the Cincinnati Contractors' dispute with the Union. We feel that the industry should be informed of matters such as this since the results of this dispute will be far reaching. The events here in Pittsburgh are following a similar pattern, but they have as yet not reached their climax.

In our opinion the Cincinnati Contractors have presented their side of the picture very well, and it is quite evident that they made a thorough investigation and analysis of the effects this wage increase would have on the public in general. Their findings and investigations parallel those undertaken by our association here.

We also feel that they too should be commended for their effort in presenting a true picture of the problems which the contractors throughout the country will have to meet in the event the upgrading of men and the wage increase is secured by the Union.

Might we suggest that your publication continue to inform the industry of developments in this particular situation as well as in any future developments that might affect our industry.

R. D. DARRAH,
Secretary-Treasurer

ALWAYS LOOKS FORWARD TO RECEIVING 'NEWS'

Ross & Witmer, Inc.
Charlotte, N. C.

Editor:

I have been a subscriber to the REFRIGERATION NEWS for the last couple of years and want you to know that I always look forward with a lot of pleasure to receiving it and reading its contents.

I have changed by connection and am no longer with the Carrier Corp. in Atlanta direct but am now a partner in the Ross & Witmer, Inc. here in Charlotte, N. C. We are distributors for Carrier for the southern half of the state of North Carolina. The address is 513 South Tryon St.

For your information, I have been connected with Carrier for the past 15 years, having gone with them immediately after graduating from Georgia Tech in 1930. The various jobs I held were being dealer manager in the Dallas and New Orleans areas and also Atlanta dealer manager during the last two years.

C. N. WITMER

RUSH ONE COPY

WESTERN UNION
Birmingham, Ala.

PLEASE SEND ME ONE COPY OF REFRIGERATION NEWS. CANNOT BEG, BORROW OR STEAL ONE IN BIRMINGHAM.

P. O. STAHL

A FASCINATING PICTURE

Department of Commerce
Office of Surplus Property
Washington 25, D. C.

Editor:

I am especially grateful to you for writing "Great Day Coming!" I am pleased to find it written in your usual individual, interesting, and informal style. Attention-getting titles attract me; and I am intrigued by the "probable mating between the refrigeration and aircraft industries to breed a great new service in food handling" (evidently even now taking place).

It is a fascinating picture you paint of the air transport freighter loading up with fruit and vegetables at the point of production, then zooming up to freezing temperatures to carry the quick-frozen products to receiving cold storage terminals. Certainly, yours is the vision of a practical imagination which makes your book interesting and valuable to anyone in the field of refrigeration and allied products. I congratulate you on having written it.

S. S. FRETZ, III
Acting Chief
General Products Division

CHICAGO SHAFT SEALS

Acknowledged as the industry's most effective seal for replacement (even on scored or bent shafts) because it has the self-adjusting sleevelock. Quickly installed. For REAL SATISFACTION never accept a substitute. At all jobbers.

Chicago Seals are best for Coldspot. • Only Chicago Valve Plates have replaceable valve seats.

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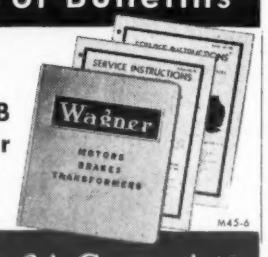
Send For Bulletins

MU-185, MU-30B, and MU-7B on Wagner ELECTRIC MOTORS



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ELECTRICAL AND AUTOMOTIVE PRODUCTS

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METHYL CHLORIDE

for your refrigeration needs

HIGH-PURITY Du Pont Methyl Chloride is designed to meet exacting requirements.

ORDER NOW!—But don't hoard.

EMPTY CYLINDERS NEEDED—To help keep up rapid deliveries, return all empty cylinders promptly! You'll help yourself and others! E. I. du Pont de Nemours & Co. (Inc.), Electrochemicals Department, Wilmington 98, Delaware.

BUY AND HOLD MORE WAR BONDS!

DU PONT METHYL CHLORIDE SPECIFICATIONS

Purity	99.5% Methyl Chloride
Moisture	0.008% by wgt. max.
Acid as (HCl)	0.001% by wgt. max.
Residue on Evaporation	0.01% by wgt. max.
Boiling Range (760mm)	—24.6° to—23.6°C.
Color	water white, clear

DU PONT ELECTROCHEMICALS

DUPONT BETTER THINGS FOR BETTER LIVING ... THROUGH CHEMISTRY

ALWAYS BEST CARE
IN FILLING YOUR ORDERS FOR
REFRIGERATION
PARTS & SUPPLIES
Write for Catalog

THE HARRY ALTER CO.
1728 S. Michigan Ave. Chicago, 16, Ill.
Two Big Warehouses to Serve You
134 Lafayette St. New York, 13, N.Y.

Off the Chest

WE APPRECIATE 'GREAT DAY COMING!'

Tri-State Auto Supply Mart, Inc.
Hancock, Md.

Editor:

First we acknowledge our appreciation for "Great Day Coming!" It clearly indicates the line of demarcation of the prewar dealers saga.

Lastly, we are proud to be numbered among your subscribers.

E. M. MASON, Manager

WANTS DEALERS TO READ 'GREAT DAY COMING!'

General Electric Supply Corp.
712 West Third St.
Dayton 7, Ohio

Editor:

I have read your book, "Great Day Coming!" with much interest and I would like to present this book to a number of our appliance dealers.

Will you kindly advise if this book is available at this time, and to whom we should send the order?

R. H. HAND,
Appliance Sales Manager

'PRICE BUYERS' WILL GET POOR RESULTS

Bradenton, Fla.

Editor:

Reading a recent issue of AIR CONDITIONING & REFRIGERATION NEWS, I came across the sad remarks of the government cafeteria lady. From past experience I have drawn some conclusions. They may not have any bearing on her trouble but they do have some bearing on the future of this game of ours.

Some years ago competition became rather keen. Almost all manufacturers started shaving. Compressors were reduced in size and increased in speed. I have reason to believe the makers of related assemblies did the same thing in effect. In estimating the needs of a job we used to figure 14 hours running time. This was jacked up to 16 hours and when the seller of one of the lesser known makes started to figure, 20 hours was used more often than not.

I read lots of advertisements but I still believe that some wear and loss of efficiency takes place in operation of machinery. A little dust on the condenser or piston and valve wear, your hour rating goes up along with the fixture temperature. In any event many undersize jobs went in because they were a few dollars lower in first cost. Most of the cut rate artists also had cut rate engineering and installation service. The results are beginning to show as the cafeteria lady can advise.

During the last four years preceding the war we had a nationally known make of domestic and commercial equipment. In those four years we sold two new commercial compressors, partly because we refused to believe that a ⅓-hp. machine would do a ½-hp. job. This quirk on our part held our price above other offers. Also we thought we were entitled to a profit, especially so because we had to sleep with the buyers so to speak, and must give service to stay in business. As long as people buy on price, I am afraid they will enjoy poor results.

Another thing is the practice of the dealers in a large city not far from our county. Often their trade-ins are sold here with a paint brush overhaul. One dealer purchased his new stock direct from the factory, often driving his truck over a thousand miles to bring back a load, saving much freight.

If he couldn't unload his used job, he could still beat us on price by the jobbers margin as well as any part of his margin he might be willing to give up. His installations were pathetic. In one instance, three 5-hp. jobs gave trouble soon after being installed. Over a bucketful of steel wool was removed from the compressor crankcases.

When it comes to service calls this dealer is conveniently busy and can't make it till tomorrow. "Better get some one locally and you pay him; I have to pay my own crew."

The funny part about this set-up is the fact that people go back to the dealer on repeat sales. I have seen it happen time and again.

Another pet peeve of mine might as well join the record. Automatic belt tighteners disappeared from the market some years ago, despite the fact that belts last much longer with them. Iron tube and fin condensers conduct heat much faster than copper, or so we have been told. But we know from bitter experience, the iron often rusts through and a charge of gas, as well as stored products, plus the condenser are all lost.

I suspect the government lady has been sizing up some equipment subject to the blessings enumerated above. There are plenty of others, but you may be getting tired.

A. R. POOL

WICHITA FIRM READY FOR DISTRIBUTORSHIP

Price Bros. Equipment Co.
Wichita, Kan.

Sirs:

We have an organization of young, energetic people with varied abilities and a wide acquaintance with many business concerns in Kansas and northern Oklahoma. Attached is a copy of a recent news release describing our building facilities. Adequate equipment for the office, parts, servicing of a sizeable volume is also owned. An almost priceless asset of these times is a fleet of six late model automobiles and a truck.

The principals of this business have owned and conducted one other successful business in Wichita for the past 29 years. That business, as well as this one, has established a reputation for volume, fair dealing, and good service, which we welcome having investigated. Exclusive of investments in building and equipment, we have approximately $200,000 operating capital. These facts can be confirmed by inquiry through the Fourth National Bank, Wichita, Kan.

Our franchise for the wholesale distribution of Ford-Ferguson tractors and implements has been recently terminated. We intend to use the aforementioned facilities for the distribution of a few quality lines of merchandise. We do not necessarily have to confine our efforts to farm machinery, but are thinking of radios, refrigerators, deep-freeze units, and other electrical appliances.

We are writing to you, thinking that you perhaps might have some helpful suggestions to offer us. We are not so much interested in immediate profits as we are in laying the foundations for a sound and permanent future operation.

G. W. HAMMONS,
Manager

'COVERED THE PROBLEMS VERY THOROUGHLY'

V ASAC Hq. & Hq. Sqdn.
APO 351
c/o Postmaster, San Francisco

Sirs:

I can certainly agree with the article by Lt. Dickinson and Sgt. Rivers in your March 26 issue. They covered the problems of operation in this area very thoroughly.

Our problems in the air corps are much the same with the exception of high side float systems as the air forces bought many of a popular Australian make on reverse lend lease. Also, we have more air conditioning for instrument and bombsight maintenance.

We have also had experience with copper plating in methyl systems due to high pressures and bad oil.

We have improvised on valves usually using shim stock or feeler gauge reeds with good results. We use the standard air corps thermometer tester and recharge any thermostatic type switch or valve, many of which are broken due to mishandling and so much shipping.

We could not operate at all without our machine shop truck. We can make almost any type of repair from making fittings to a new piston.

I certainly enjoy the NEWS, reading about stateside problems.

CPL. JESS MILBURN

BARNES MFG. CO. WON'T MAKE FREEZERS

Barnes Mfg. Co.
Mansfield, Ohio

Editor:

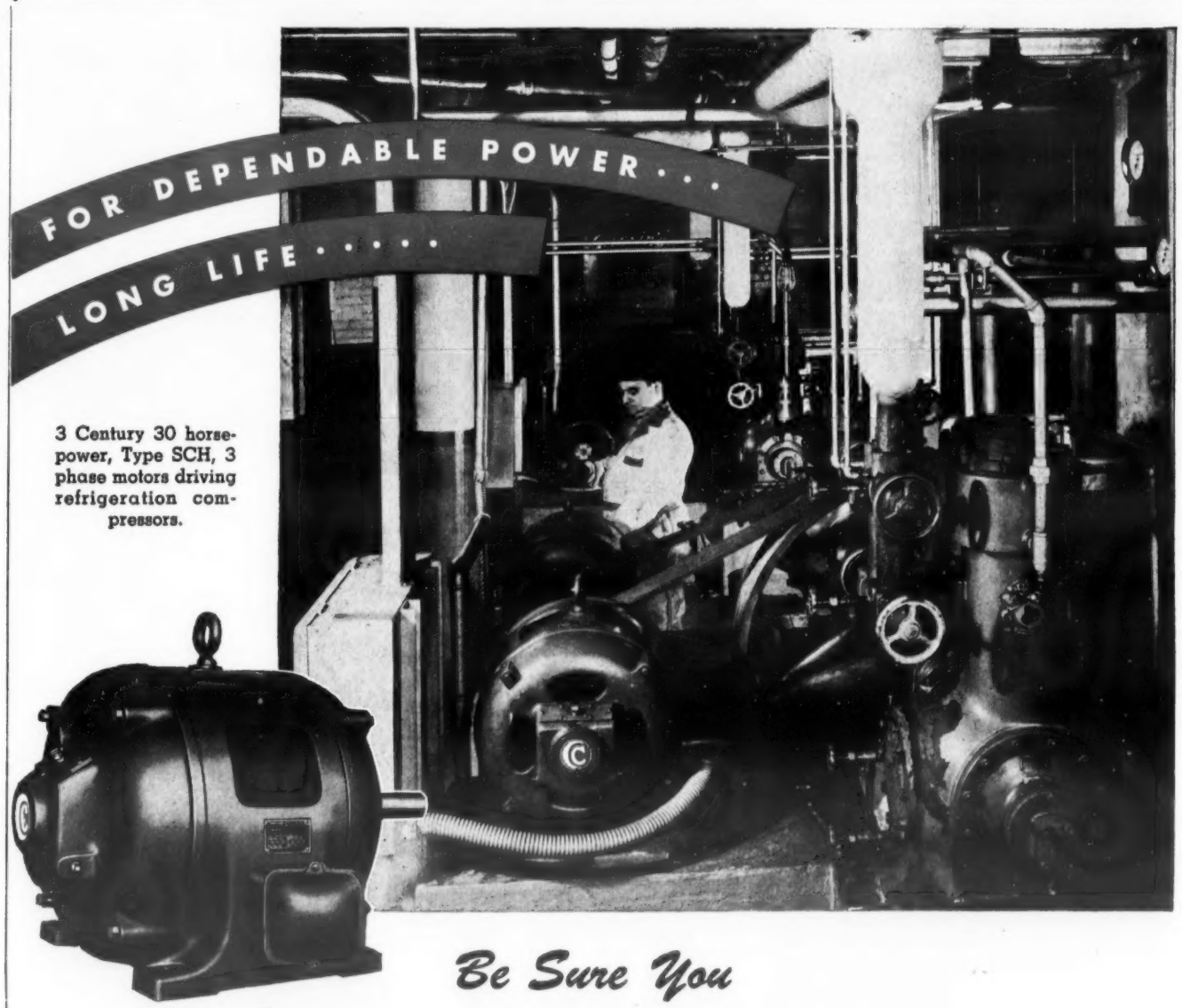
Somewhere in your various publications we seem to be listed as a manufacturer of home freezer units. As a result we are being deluged by salesmen on the various phases of the unit.

We would appreciate your cooperation in listing us as a prospective manufacturer, but have definitely dropped the idea so far as any immediate plans are concerned.

We would, therefore, appreciate your canceling any listing of this nature that you have for us.

FRANK ELIAS, Manager,
Product Development

Refrigeration
AND AIR CONDITIONING
YOU will find NIBCO WROT Fittings, return bends and tubular parts mighty useful in laying out air conditioning or refrigeration equipment. In many cases, instead of having to buy a special part, you will find what you need in our standard line...tees, ells, couplings, reducers, adapters, crosses, return bends, hangers ...more than one thousand items and sizes are listed in Catalog 613. If you do not have a copy, write for it today.
NIBCO WROT Copper Fittings
NORTHERN INDIANA BRASS CO.
ELKHART, INDIANA
VALVES AND FITTINGS SINCE 1904



3 Century 30 horsepower, Type SCH, 3 phase motors driving refrigeration compressors.

Be Sure You
Use CENTURY SCH MOTORS
ON REFRIGERATION COMPRESSORS

The smooth, positive starting and accelerating characteristics and the high torque of Century SCH Polyphase Motors make them ideal for large refrigeration compressors. These motors have the ability to start heavy loads with low-starting current and to operate smoothly, day in and day out.

In addition to Type SCH Motors, Century offers a complete line of motors in a wide variety of sizes, 1/20 to 600 horsepower, and types both AC and DC to meet any heating, cooling, or ventilating application. Among the advantages of these motors are the following: unusual freedom from mechanical and electrical vibration, quiet starting and operating, unique cushion bearing bumpers that reduce chatter from V-belt irregularities, cushion base mountings are available for motors 3 horsepower and smaller.

When you need an electric motor for operating compressors, pumps, blowers, fans, unit heaters, or any other similar application, investigate the advantages Century has to offer.

Century C MOTORS

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420 Offices and Stock Points in Principal Cities

MANHATTAN
WHIPCORD
F/HP
V-BELTS
for satisfactory service
Important any time, but more so now, MANHATTAN Whipcord F/HP V-Belts keep home and store equipment running.
MORE POWER—grip the grooves, stop slips, uniform "pull."
LONGER LIFE—Endless cord construction resists internal heat and side wear.
SILENT RUNNING—Smooth and noiseless on high-speed drives.
THE MANHATTAN RUBBER MFG. DIVISION of Raybestos-Manhattan, Inc.
Executive Offices and Factories . . . Passaic, N. J.

New Virginia Beach Enterprise

RICHMOND, Va.—Virginia Beach Frozen Foods, Inc., with principal offices in Princess Anne County, has been granted authority by the State Corporation Commission to engage in "the business of raising, buying, selling, processing, freezing, storing, and preparing for market all foods and by-products."

The corporation also may conduct a retail and wholesale frozen food business, and rent freezer lockers to individuals and companies.

Officers are W. H. Kitchen, Jr., president; Virginia Morrison, vice president; and F. E. Kellam, secretary. Maximum capital stock is $100,000.

Locker Plant In the Basement Offers Storage Space To Chicago Apartment House Tenants

By Phil B. Redeker

CHICAGO—Air Comfort Corp. of this city is installing refrigerated locker facilities in three more apartment houses here, after having pioneered the original installation of 32 lockers in an apartment house at 180 E. Delaware here earlier in the year.

While there has been considerable conjecture on the possibilities of this method of receiving and storing commerically packed frozen foods in the apartment house type of dwelling, it is believed that this is the first installation on any scale that has gone into operation.

The idea was conceived and put into effect by H. E. Wheeler, president of Air Comfort Corp., Chicago. This firm handles the Carrier line of refrigeration and air conditioning equipment.

The 32 lockers are installed in an insulated enclosure (not a room) in the basement of the building at 180 E. Delaware. The lockers are flush up against four large cold storage type doors, each of which covers eight lockers (see illustration). The patron thus does not enter into a cold room in order to use a locker. Each locker has 3-cu. ft. capacity, half the size of the usual drawer used in refrigerated locker storage plants. Some modifications are being made in the design of the new installations.

One Answer To Frozen Food Distribution In Big City

This is the first "locker plant in the basement" installation to be made in an apartment house in Chicago. Note how by means of this construction the lockers are readily accessible without entrance into a low temperature room. Newer installations are of somewhat different design.

Each patron has a pass key for his own locker, and there is *one* master pass key to which Air Comfort Corp. retains title.

Apartment house dwellers who have rented a locker can either purchase their foods at a retail store and keep their locker filled in that manner, or they can use the facilities of a frozen food delivery service of a company distributing frozen foods, which has obtained the "concession" from Air Comfort Corp.—the concession being the right to make use of the master pass key in filling orders.

The apartment house dweller, if he uses this service, orders by mail from an order blank sheet sent to him regularly, and delivery is made once every two weeks. He pays his bill by mail, and sends ration points by mail, where necessary. Thus, for all practical purposes, he need never have any personal contact with the vendor of the foods.

Mr. Wheeler states frankly that it is in the "food concession" that profits are to be realized in this kind of an installation. Since the installer retains the title to the equipment, and to the master pass key, he has a real "concession" to market, because the food supplies for 32 people—virtually guaranteed from week to week—represent a volume of business of considerable interest to the food distributor.

The market for the equipment itself is not too consequential, Mr. Wheeler points out. In Chicago, there are some 1,100 apartment house dwellings which have 40 or more apartments—anything smaller than this not being considered a likely prospect.

It might be reasonable to believe, says Mr. Wheeler, that you could sell such a locker installation to 10% of this market, which would mean some 100 installations. Thus to merely sell and make the installations would not mean too much over the long haul.

However, by retaining the ownership of the installation, the installer realizes the revenue from the rent of the lockers (in the case of the E. Delaware installation, $2 per month per locker), and a continuing income from the rights to the food concession.

Air Comfort Corp. originally set out to supply the frozen foods with an organization called "Foodmaster Delivery Service," but planned to contract out the rights to a regular food distributing concern as soon as

(Concluded on next page)

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In the case of this young man, a bounce of prevention is worth many a trounce of cure.
For the "young" refrigeration unit, moisture prophylaxis is infinitely better than subsequent dehydration. TZ will do it either way, but the wise engineer prefers the preventive technique to the curative.
A TINY AMOUNT • A BIG JOB • SMALL COST
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Food Concession Is Key To Plan For Investment In Lockers For Large Apartment Dwellings

(Concluded from preceding page)

one was available.

There are many good reasons why this method of food distribution is a natural for both the apartment house dweller and the food vendor.

Apartment house dwellers are what might be called "transient" livers, in that often both husband and wife work, or have interests which keep them out of their dwelling most of the day. Thus, they have always been faced with a problem in shopping for foodstuffs.

This fact, plus the lack of space, would seem to be a bar to the use of a home freezer in apartment houses. Use of the home freezer would virtually necessitate someone being home to accept delivery, but with the locker-in-the-basement system, this isn't necessary.

For the food distributor, it makes delivery of frozen foods a very economical operation, for he supplies 32 customers with a two-weeks' supply in one quick delivery operation.

With the advent of frozen cooked foods and bakery goods, there would be practically nothing that the apartment house dweller could not have delivered to his locker.

Some interesting sidelights developed out of Air Comfort Corp.'s first approach at selling and installing such an installation.

It was found that the approach to the owner or operator of apartment houses was best made through the agency of a real estate management firm. In this first installation, the operator is being paid a nominal fee for permitting the lockers to be installed in his building, but as the idea becomes competitive among apartment house operators, such a fee may no longer be necessary.

Original promotion to the tenants was all done by mail. Not all of the lockers were sold before they were put into use, but the users soon sold enough of the others on the idea so that 100% rental was achieved in a relatively short time.

The insulated enclosure in which the lockers are installed was made in sections and bolted together after being assembled inside of the building. Condensing unit was mounted on top of the enclosure. No special restrictions were imposed by building or other codes on the installation. It is a relatively inexpensive type installation, vital in realizing on the investment within a reasonable time.

There have been few hitches in the use of the lockers. Air Comfort Corp. has developed a method of keeping the locks from freezing, on which patents are pending.

It is Mr. Wheeler's thinking that this kind of a business is not one in which any kind of a refrigeration dealer or distributor can engage; that there is possibly only room for one good-sized operator in each very large metropolitan center.

There is little possibility for this type of operation, he believes, in smaller population centers, except as a possible adjunct to an established frozen food distribution business.

SWPC Will Continue Loans To Small Plants

WASHINGTON, D. C.—The Smaller War Plants Corp. will continue to make loans to small plants for civilian production, and the agency's 114 field offices throughout the country have been so notified, Maury Maverick, chairman and general manager has announced.

The end of hostilities did not nullify the act of Congress (Public Law 603) that gave SWPC power to afford financial assistance to small manufacturers, Mr. Maverick said. On the contrary, he said, the needs of small business and our responsibilities are increased.

"Congress and the President have recognized that a general war situation will continue in the period of transition from war to peace," the SWPC chairman said. "This corporation clearly has a definite responsibility of assisting small business to maintain its competitive position, which is necessary to the economic stability of the nation.

"Therefore, we will continue to make available the services of this corporation to keep small business in operation during the transition from war to peace-time activities."

Plan Monterey Park Plant

MONTEREY PARK, Calif.—Building permit has been issued for construction of a cement block structure to contain 10 freezing rooms at 100 N. Elizabeth St., here, for Charles Griffith. The building will be 105 ft. long and 40 feet wide and will cost $10,500.

Virginia Locker Plants '$ Million Investment'

RICHMOND, Va. — With many more contemplated, more than $1,000,000 already has been spent on the construction of 25 or more frozen food locker plants in Virginia, the Virginia State Chamber of Commerce declares.

Existing plants contain an average of 500 lockers, indicating that more than 12,000 Virginians already have frozen food supplies in reserve.

"Interest in freezing as a method of preserving is resulting in the building of frozen food locker plants in Virginia as rapidly as priorities and materials can be obtained," it was stated. "A number of frozen food locker plants already have been built and plans and applications for priorities indicate that many more will be built as soon as possible. Indications are that freezing will become a widely used method of conserving food."

Virginia locker plant operators have organized the Virginia Frozen Food Locker Association, headed by W. W. Cobb of Suffolk.

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Pipe is made for conveying, not for cooling. That's why your car's radiator isn't plain prime-surface pipe but has hundreds of "honeycomb" fins that transfer heat in a hurry.

Yet, many "modern" refrigeration systems still use outmoded pipe coils. Efficient heat transfer requires ***EXTENDED*** surface—***FINS!*** It will pay you to install modern MARLO Fin Coils for:

Greater efficiency • Smaller size
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"Farm and Home" Freezers

Engineered TO GIVE LASTING, TROUBLE-FREE SERVICE AND SATISFACTION . . .

"QUALITY is remembered long after PRICE is forgotten" is a truth that applies particularly to freezers for the farm and home. Today, with a great and widespread public interest in home freezing units, it is highly important for distributors and dealers to choose a line that insures these *essential* features:

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BEN-HUR *Farm and Home Freezers* assure you all of these features — and many additional refinements and operating improvements resulting from the Third of a Century of quality manufacturing experience behind the "BEN-HUR" name. All of which adds up to customer satisfaction — plus PROFITS for you!

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M&E

Unit Coolers

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NO CONDENSATION NUISANCE

The design of the M & E Unit Cooler averts the danger and nuisance of water drip.

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A Market for Every Dealer—
A Dealer for Every Market

The Chrysler Airtemp line of heating, cooling and refrigeration, automatically commands a major market in any community. The style and engineering principles incorporated in each individual product reflects superiority and will be offered to the consumer at prices that reflect mass production economies. With strong national advertising, tailored merchandising and selling practices to assist the dealer, volume sales will be a normal result. The dealers handling Chrysler Airtemp will be given territories for intensive sales cultivation that are fair and extremely productive. Chrysler Airtemp has a wide range of cooling and refrigeration products, including the famous "Packaged" Air Conditioner pioneered and designed to meet practically every need in temperature-humidity control equipment.

The Chrysler Airtemp Triple Line . . . Heating, Cooling, and Commercial Refrigeration . . . offers dealers an unusual opportunity for 12 months' profitable operation. Dealer agreements will be available for any single Chrysler Airtemp Line . . . any two lines . . . or for all three lines. • Airtemp Division, Chrysler Corporation, Dayton 1, Ohio. In Canada, Therm-O-Rite Products, Limited • Toronto, Ontario.

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HEATING • COOLING • REFRIGERATION

Army Refrigeration Problems

By P. B. Reed

Manager, Refrigeration & Air Conditioning Division, Perfex Corp.

Heat Exchangers

Fresh foods are usually stored in temperatures above freezing but under 50° F. In commercial types of refrigerators, walk-in coolers, reach-in refrigerators, and the like, the evaporator is usually held at an *average* temperature of about 20° to 25°.

With the refrigerant saturation temperature at 25° in the evaporator and allowing 10° for superheat, the temperature of the refrigerant leaving the evaporator is 35°. In evaporation of ice cream cabinets or food freezers the evaporator is about -10° and the gas leaving the evaporator about 0°. Air conditioning coils are held at about 40° with the superheated gas leaving the coil around 50°.

In most localities and under most conditions the dewpoint of the atmosphere is apt to be above the temperature of the superheated gas leaving the evaporator, even the 50° gas from the air conditioning evaporator. If, therefore, the suction line were to leave the cabinet as soon as it left the evaporator it would:

1. Be below the dewpoint of the air and would "sweat" and drip water, which might damage merchandise or furnishings or at best would be quite messy.
2. Lose the refrigeration still in the cold gas.

A DRIER COIL

In order to prevent the drippage from the suction line and to save the refrigerating effect of the cold suction line, it is common practice to use a "drier coil." This drier coil can either be a part of the main coil or a separate coil. If a part of the main coil, the latter must be quite a little larger.

In either case this extra coil surface costs money and takes up space. Its comparatively high temperature, and the comparatively low temperature difference between it and the air makes the drier coil rather uneconomical and bulky.

HEAT EXCHANGER INSTEAD OF DRIER COIL

Another way to save this refrigeration that would otherwise be lost to room air and at the same time to warm the gas up to a point where the suction line will not be likely to "sweat" is to use a heat-exchanger, sometimes called a heat-interchanger.

Actually, a heat-exchanger is a general term that covers any device that puts one cold liquid or gas in thermal contact with a warm liquid or gas so that the heat flows from the warmer to the colder portion. A water-cooled condenser is one form of heat exchanger; a water cooler is another.

However, the term "heat-exchanger" has come to be applied more particularly to a device that puts the warm liquid refrigerant, from the receiver on its way to the evaporator, in thermal contact with the cold or cool suction gas on its way from the evaporator to the suction or intake side of the compressor.

Just soldering the liquid and suction lines together for a considerable part of their total length is one form of heat exchanger; in fact, this method has been widely used, although, due to the small amount of surface in contact between the two lines, it is not very effective, that is, not very much heat is exchanged from the liquid line to the suction line.

WHY COOL THE LIQUID?

But why does cooling the liquid refrigerant before it gets to the expansion valve save refrigeration? The cooling ability of the refrigerant is represented by its "latent heat of vaporization" which is the number of B.t.u. per pound absorbed by the liquid when it vaporizes (boils) and becomes a vapor or gas at the *same* temperature.

This amount varies according to the kind of refrigerant and the temperature of the liquid refrigerant. For "Freon-12" at 40° it is 65.71 B.t.u. per pound, and at 25° it is 67.40 B.t.u. per pound. The latent heat of vaporization of methyl chloride at 40° is 172 B.t.u. per pound and at 25° it is 175.86 B.t.u. per pound.

REDUCTION OF SPECIFIC HEAT

If the evaporator is being carried at an average temperature of 25° the refrigerant itself must be cooled from the temperature at which it enters the expansion valve, down to 25°. At 90° the liquid refrigerant is quite warm, and the "sensible" heat must be removed when cooling it from 90° to 25°.

The amount of sensible heat in liquid "Freon-12" at 90° is 28.70 B.t.u. per pound, and at 25° it is 13.66 B.t.u. per pound. The difference, 15.04 B.t.u. per pound, is the amount of heat that must be removed from the liquid to cool it from 90° to 25°. The refrigerating effect necessary to remove this 15.04 B.t.u. per pound must come from the "latent heat of vaporization" of the liquid, which at 25° is 67.40 B.t.u. per pound.

So, if the liquid enters the expansion valve at 90°, the net amount of cooling effect left in the liquid after the liquid itself is cooled from 90° down to 25° is (67.40 − 15.04) 52.36 B.t.u .per pound.

Now suppose the liquid refrigerant is fed to the expansion valve at 75° instead of 90°. The amount of sensible heat in the liquid at 75° is 25.08 B.t.u. per pound. Subtracting the 13.66 B.t.u. per pound (sensible heat of the 25° liquid) leaves only 11.42 B.t.u. per pound needed to cool the liquid down to 25°, or a savings of 3.62 B.t.u. per pound. This results in 55.98 B.t.u. per pound of net refrigerating effect being available instead of 52.36 B.t.u. per pound. This is a gain of about 7%, which is well worth while.

MANUFACTURED HEAT EXCHANGERS AND TEES

There are several types and makes of heat-exchangers commercially available. Their capacity and effectiveness is dependent upon the amount of surface through which the cold suction gas may absorb heat from the warm liquid. A good heat-exchanger must present a large surface, and this usually is best done

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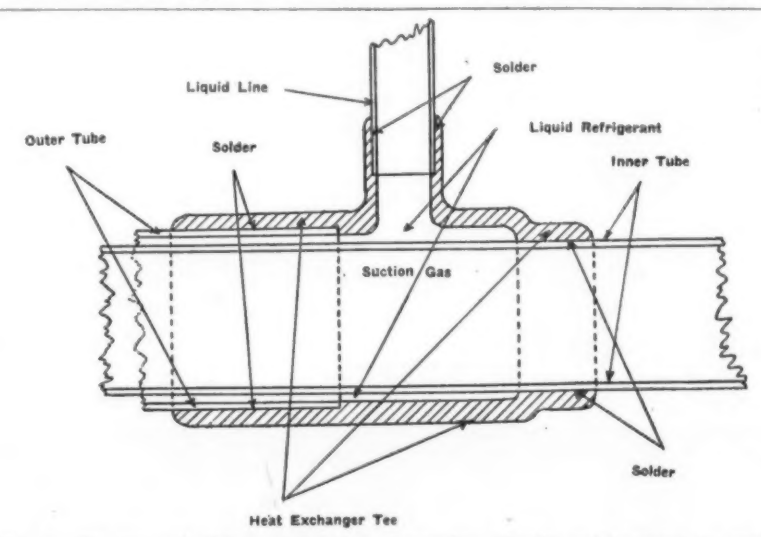

Fig. 1—By use of this special tee, incoming liquid refrigerant is cooled by contact with suction gas being withdrawn from the evaporator. Liquid refrigerant enters the tee at the top connection and then flows between the outer tube and the inner tube. Cold suction gas flows through inner tube.

Suggested Ratings for Heat Exchangers

Tubes O.D. in Inches		Liquid Line Con-	Length of Heat Exchanger For Condensing Units of Various Horsepowers							
Outer	Inner	nection	¼ Hp.	⅓ Hp.	½ Hp.	¾ Hp.	1 Hp.	2 Hp.	5 Hp.	10 Hp.
½*	⅜*	¼*	2	2¾	....	....	....	....	....	....
⅝*	½*	¼*	1½	2	3	....	....	....	....	....
⅞	⅝*	⅜*	....	....	2½	3¾	5	....	....	....
1⅜	1⅛	½*	....	....	....	2	2¾	5½	14	....
1⅝	1⅜	⅝*	....	....	....	....	....	4½	11	22
2⅛	1⅝	⅞	....	....	....	....	....	....	....	19

*Soft copper tubing—other sizes are in hard drawn tube.

Heat Exchangers

(Concluded from preceding page)

by spreading the warm liquid line around the cool suction line.

Several manufacturers make "heat-exchanger tees" which are like other tees except that they are so designed that one of the tubes goes entirely through the tee, thus putting that tube inside the larger tube. The inner tube comprises the suction line, and the liquid refrigerant passes through the annular space between the two tubes, which is the liquid line.

Fig. 1 illustrates a typical connection using a manufactured heat-exchanger tee.

Another method is shown in Fig. 2. The ring may be of brass turned on a lathe to proper size. A hole is cut in the outer tube and a saddle used to attach the liquid line, or a tube is brazed directly to the outer tube. For small sizes using soft copper tubing the outer tube may be merely crimped down to the inner tube and brazed in place, but this method should be used only in case tees or rings are unavailable.

It is difficult to standardize on ratings for heat-exchangers, for, in addition to the thermal contact surface, other factors affect the rating of the heat exchanger, such as velocity of the refrigerant, amount of oil in the refrigerant, temperature of the evaporator, super-heat of the gas entering and leaving the heat exchanger, etc.

However, the table above shows the sizes of heat-exchangers of the concentric tube (tube-within-a-tube) type shown in Fig. 1 and 2. These ratings are quite conservative and are based on "Freon-12" gas leaving the evaporator at 65° with 40° superheat, and the liquid entering at 90° and leaving at 75°, which gives precooling of 15° to the liquid to the evaporator.

In order to get the utmost benefits from the heat-exchanger it should be connected "counter-flow" so that the coldest possible liquid refrigerant will be drawn from it for a given temperature of suction gas. For counter-flow the liquid flows in an opposite direction to the gas. The liquid outlet is on the same end as the gas inlet; the liquid inlet is on the same end as the gas outlet.

Heat exchangers are particularly desirable on low temperature, for there the losses are apt to be much greater than in air conditioning evaporator temperatures, and percentage-wise, greater savings are possible by utilizing the refrigeration that would otherwise be wasted.

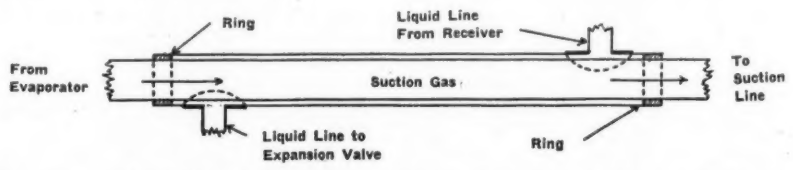

Fig. 2—A tube-within-a-tube heat exchanger may be made by installing a larger outside tube on a suction line, blocking the ends of the outer tube with brass rings. Saddle connections on the outer tube permit liquid refrigerant from receiver to flow around the suction line before going to expansion valve.

'Most Diplomatic Service Man' Must Think Fast to Promote Customer Goodwill

By C. Dale Mericle

DAYTON, Ohio—"I'm so mad at this refrigerator that I'd throw it out the window if I could," stormed the housewife to the repairman.

"Madam," soothed the repairman as he walked over and raised the window, "I've been sent out here by the dealer to do everything in my power to help you. Now while you can't throw the refrigerator out the window alone, maybe with my help it can be done. Let's go."

"Wait a minute," she hastened, "I guess it's not really that bad, but here's the trouble. . . ."

Incidents like this have earned the title "most diplomatic service man" for G. H. "Gil" Brock, who for the past few years has operated Dayton Refrigeration & Heating Co. here, a Norge distributorship.

"That housewife did have a justifiable complaint," declared Mr. Brock. "Several times she had reported that the refrigerator made too much noise, but each time the service man called, he was unable to find anything wrong.

"Finally I went out and noted that the unit didn't produce any more noise than could be expected, but after the incident of the window the housewife explained what the trouble actually was.

"She said that the noise from the refrigerator bothered her only at night in her bedroom," continued Mr. Brock. "This sounded strange to me, but I checked the bedroom and discovered that the unit *did* make a lot of noise. Then I realized that the refrigerator was located on the opposite side of the wall, which was thin enough to serve as a perfect sounding board.

"At my suggestion we moved the refrigerator to another spot in the kitchen, and there were no more complaints."

And here's another one the boys like to tell about "Gil."

It seems that "Gil" had been called out three or four times to service a refrigerator, but there was actually nothing wrong with the unit. The housewife, however, was not satisfied with its operation. Then the dealer phoned "Gil" that the housewife had just called up again with the same old mysterious complaint. "Gil" balked.

"If I go out there again it will make the fifth time, and there's nothing wrong with the box," he emphatically told the dealer.

"And if the neighbors, who know what make of refrigerator that woman bought, see me walking in that house again with my tool box, they'll be convinced that this refrigerator is no good, and your sales may take a nosedive.

"What you'd better do is send a salesman out to 'sell' that refrigerator again to the housewife. Tell her just what it can do and what it can't do, and then she won't be bothering us all the time."

They did.

It worked.

TRUCK

Immediate Delivery
Rubber Tired Wheels

NOW! "Handee Andy" all purpose tube steel 600 lb. cap. Full size, first quality, not a wartime makeshift. Light wt. very easy to handle. Ht. 44", 14" wide at nose. Curved cross pieces. The only truck we sell. Specializing permits a better truck, and more of them! By mail only at present time. Fully guaranteed. F.O.B. 1% 10 days. Unrated firms cash with order. Clip this.

9.95 Lots of 12

Lots 3, $11.95
Single, $12.95

The HANDEES CO., Dept. 25G7 Bloomington, Ill.

Lavoie & Lickteig Win Airtemp Promotions

DAYTON, Ohio — Appointment of W. A. Lavoie as plant engineer and Edward G. Lickteig as master mechanic of Airtemp Division, Chrysler Corp., has been announced by A. R. Fors, Airtemp vice president in charge of manufacturing.

Mr. Lavoie comes to Airtemp from the Anniston (Alabama) Ordnance Depot, one of the largest in the world, where he was general plant engineer for almost two years.

In 1928 Mr. Lavoie joined Chrysler, starting at Chrysler's original Jefferson Ave. plant. When the Plymouth Division was instituted, he transferred and helped equip the big Plymouth factory for line production. In 1936 he transferred to DeSoto.

From there he was called to war work, to initiate and set up plant layouts, purchase equipment and install it in record time for the Chrysler Tank Arsenal's needed output of medium tanks. In September, 1943, he went to Anniston Ordnance Depot.

Mr. Lickteig goes to Airtemp from the Chrysler Tank Arsenal, Detroit, where he had been assistant master mechanic since October, 1942. He started with Chrysler Tank Arsenal as chief tool designer in November, 1940, after transferring from the Plymouth Division where he was a tool designer since 1939.

New Los Angeles Firm

LOS ANGELES—Cleveland Refrigeration Sales & Service has been organized by M. C. Cleveland at 3281 Veteran Ave., here.

Now Plant Engineer

W. A. LAVOIE
Was recently appointed plant engineer for Airtemp Division.

Named Master Mechanic

EDWARD G. LICKTEIG
Comes to Airtemp Division in Dayton, Ohio, as master mechanic.

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You'll Get HIGHER EFFICIENCIES, BETTER PERFORMANCE

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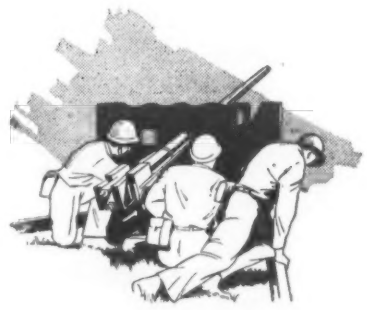

Today AMP Corporation is manufacturing millions of highly specialized units for the Army and Navy, many of which were originated by AMP engineers. Tomorrow, all of our extensive manufacturing and research facilities will be at the service of industry.

AMP control devices and refrigeration systems, based on new and proven patents and improvements, offer manufacturers, processors, and users of existing equipment — greater efficiencies at lower cost in three basic groups:

1. **Refrigeration, air conditioning, and processing flow controls**
2. **Refrigeration specialties**
3. **Beverage carbonator-refrigerating dispensers**

AMP specialties enable the equipment manufacturer to increase the salability of his product through new principles of control in refrigeration — the processing industries to secure higher efficiency, greater sanitation, and higher utilization of thermal energy. In the beverage dispensing field, AMP carbonation has been acclaimed the finest ever achieved.

It will pay you to investigate the technological advances made by AMP engineers during the past few years and how the results achieved may well solve your own particular problems. Write today.

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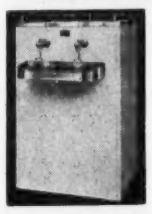
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Comparisons of Types of Refrigeration Condensers On the Basis of Design & Operating Advantages

By H. J. Kinkade, Engineer, Young Radiator Co.

The three most usual methods of condensing refrigerant vapors are (1) air cooled condensers, (2) shell and tube condensers, (3) evaporative condensers. Each of these is a good and practical method and each has its own field of application where it is predominantly used.

The air cooled condenser is used mostly for small refrigeration units of 3 hp. or less. Such applications cover practically all household refrigerators and small commercial refrigerators; also a great many small air conditioning jobs such as individual room coolers. Air cooled condensers are also used on larger installations where water is not available, such as bus and railroad car air conditioning.

The advantages of the air cooled condenser may be listed as follows:

1. Low cost in small sizes
2. Simplicity
3. No water required

Its disadvantages may be listed as follows:

1. High cost in large sizes
2. Comparatively large amount of air needed.
3. Cost of power to move large amount of air.
4. More horsepower needed to drive the compressors due to the high head pressures with air cooled condensers.
5. Lowest capacity in hot weather when the highest capacity is needed.

The shell and tube condenser may be used for any size refrigeration job. It is low in cost and efficient in operation. The application of shell and tube condensers is usually divided into two parts: (1) when used with well water or city water run to waste, (2) when used with a cooling tower.

JUDGING THE SHELL-AND-TUBE

Where a shell and tube condenser uses well water or city water which is allowed to run to waste, its advantages are as follows:

1. Low first cost
2. Low compressor operating cost
3. Low maintenance cost

Its chief disadvantage is the high cost of the city water used; or in case of well water, the high cost of pumping a large quantity of water. Some cities will not allow this method of condensing at all, due to a shortage of water or to overloading of sewers with the used water.

A great many such systems are in operation since it is almost universally used on all refrigeration jobs of less than 7½ compressor horsepower where water and sewer connections are readily available. This system is also used on many large jobs when a plentiful supply of cool water is available at low cost.

WHERE COOLING TOWER ENTERS

When a shell and tube condenser is used in conjunction with a cooling tower, the objection of water cost disappears. The water is continually recooled and recirculated, and the only loss is from evaporation and windage. Such a system has many advantages where water is scarce, or costly, or warm. It is used on the largest sizes of refrigeration compressors as well as many smaller sizes.

When the water used for condensing the refrigerant vapors is cooled in such an evaporating system, the head pressure against which the compressor must operate may be kept low most of the operating time. This results in low operating cost for the compressors.

The disadvantages of such a system are as follows:

1. High first cost of the cooling tower, cooling tower basin, pumps, piping, and erection.
2. High cost of pumping a large volume of water through the condenser and through long pipe lines to and from the cooling tower.
3. Cooling tower is outdoors and subject to freezing in winter.
4. Maintenance cost is comparatively high.
5. The nuisance of water drifting from the tower.

The evaporative condenser was designed to utilize the advantage of the condensing system using a shell and tube condenser with a cooling tower, without its disadvantages. The chief disadvantages of the evaporative condenser is high first cost and high maintenance cost.

Initial cost of an evaporative condenser is usually less than that of a comparative cooling tower with shell and tube condenser when the cost of pumps, piping, and erection are all figured; but it is still rather high. The evaporative condenser requires cleaning scale from the coils, cleaning of the sump pan and nozzles, and oiling of the pump, motor, and fan shaft bearings at reasonably frequent intervals.

THE EVAPORATIVE CONDENSER

It has, however, certain inherent advantages which very well offset the disadvantages. It is usually placed inside the machine room where it is constantly under the eye of the operator. It is close to the compressor for ease of service and operation. It is indoors where it is not so subject to freezing as the cooling tower. It has only a small pump for the spray water.

Any scale formation on the tubes is external where it can be observed, not hidden inside as is the core with a shell and tube condenser. The horsepower required to drive both the fans and spray pump is usually less than that required for the pump alone on a cooling tower.

In operation the evaporative condenser is essentially an indoor, induce draft cooling tower with the refrigerant coils suspended in the high velocity air and water streams so that the efficiency is high and a large amount of cooling can be done with a small compact unit.

Small sizes of evaporative condensers are usually constructed in only one section. Larger sizes may be made in two separable sections with the fans in one section and the coils and sump in another. The largest sizes are usually made in three separable sections:

1. Fan section
2. Coil section
3. Sump section.

The fans and fan housings of an evaporative cooler require careful protection against the effects of the hot moist air in which they operate. They should be hot dip galvanized after fabrication, after which the fan wheels must be balanced. The fan housings are sometimes additionally protected by a coat of asphalt mastic.

SOME DESIGN CHARACTERISTICS

The fan shaft is usually of cold rolled and ground shafting. The eliminator plates are usually hot dip galvanized after fabrication. Fans, fan housings, and fan shafts are sometimes made of stainless steel, but this is very expensive material, and its use is justified only in especially corrosive conditions.

Refrigerant coils are made with steel tubes for ammonia or with copper tubes for "Freon" or methyl chloride. Coils may be of bare tubing or of finned construction. If steel coils are used they must be hot dip galvanized or otherwise suitably protected against rust and corrosion.

The water for evaporation on the coils may be sprayed on, dripped on, or splashed up onto the coils. Spraying through large orifice nozzles is the most usual method of water distribution.

Only a very small amount of water is needed for evaporation, but a large excess of water is usually sprayed over the coil to assist in washing down the coil and to be sure that all coil surfaces are continuously wetted.

(Concluded on next page)

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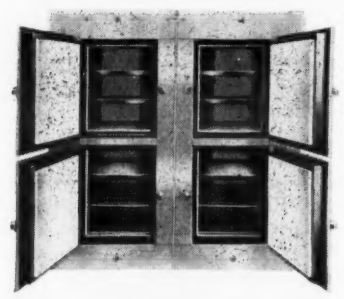
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Correct Installation Vital in Evaporative Type Condensers

(Concluded from preceding page)

A large excess of water requires more power on the spray water pump, but this is such a small item of cost that it is usually discounted.

All the interior metal surfaces of the evaporative condenser must be well protected against rust and corrosion. This is especially true of the sump pan.

The evaporative condenser should be installed as near the compressor as is practical in order to avoid long refrigeration piping. It should also be near a wall or otherwise located so that the discharged air may be readily conducted outdoors.

DESIGN OF AIR DUCTS

Air ducts should be as short and straight as possible. The air from the evaporative condenser should not be discharged near the intake of the unit. It should not be discharged anywhere that the hot moist air would be objectionable.

Evaporative coolers are sometimes placed out doors or on a roof to eliminate air ducts. This is often done in the south where little danger of freezing is encountered.

Evaporative coolers do not cause much vibration. Any concrete floor 4 inches thick or thicker should be suitable for their installation.

Heavy piping should not be hung on the cooler, but should be supported externally.

After installation the voltage and amperage of the fan motor should be checked for possible overload. The quantity of air should be checked against the manufacturers recommendations. The water pressure at the spray pump discharge should be checked. If any of these are not what they should be, steps should be taken to correct them before placing in operation.

Almost all water has scale forming properties, so it is usually advisable to treat the make-up water continuously to minimize scaling as much as possible.

TYPE OF SERVICE NECESSARY

Like any other piece of machinery, an evaporative cooler requires some service. It is advisable on monthly inspection to check the coil and spray nozzle for scale and obstruction; to oil the fan bearings; and to clean the strainer at the spray pump section in the sump.

Once every year the cooler should be thoroughly inspected for rust and corrosion. This inspection should include the fan wheels and housing as well as all parts of the frame and enclosure. Rust should be cleaned off and paint applied where needed. Any parts rusted or worn beyond use should be replaced. At this yearly inspection the spray pump should be taken apart and cleaned. The sump pan should be cleaned out and repainted if necessary. Ball bearings on motors or other places should be greased.

The evaporative condenser is a simple piece of machinery, but it does require some attention. If properly installed and serviced, it should give satisfactory use for many years.

York Engineer Is Given Patent For Testing Chamber

YORK, Pa.—A patent embodying 21 claims relating to method and apparatus of aircraft stratosphere test chambers has been granted L. R. St. Onge, Philadelphia district engineer of the York Corp. and assigned to the corporation.

Designed exactly to reproduce on the ground for test purposes flying conditions from sea level to 40,000 feet, the huge steel vacuum jugs reproduce altitude changes of both pressure and temperature at the same rate as occurs with a plane in actual flight. Also the stratochambers can maintain stratosphere conditions for as long as need be.

While the altitude chambers of pre-war days were capable of simulating stratosphere pressure conditions, few of them made any attempt to reproduce the temperature conditions of the stratosphere, and none was equipped to reproduce changes of temperature approximating those encountered by a plane in flight.

Nevertheless the studies made by the Army and Navy Medical Corps and scientists at a number of universities with the aid of the prewar altitude chambers provided invaluable information concerning the physiological aspects of high altitude flight which served as background for the designers of the strato-chamber. Their big problem was how to change temperatures in a large test space from normal to -70° F. or lower in a matter of minutes.

Mr. St. Onge's invention solved the basic problem by providing for storage of refrigeration, thus eliminating the necessity of installing an abnormally large refrigeration plant. This was accomplished by building, inside the strato-chamber, a "climb" chamber thermally separated from the refrigeration system.

The cycle of operation calls for first cooling the entire chamber, including the "climb" chamber, to a temperature considerably below the final temperature to be produced in the "climb" chamber. Then the "climb" chamber is isolated, by means of dampers, from the cooling circuit and heated up to normal atmospheric conditions by electric heaters.

After the test subjects have been put into the "climb" chamber, the vacuum pumps and fans are started and the dampers opened to admit cold air to the "climb" chamber. A sufficient reservoir of refrigeration has been built up to reduce the temperature within the "climb" chamber to -70° F. in 12 minutes or less. At the same time pumps evacuate both chambers, to simulate the pressure change of plane climb.

The York patents relating to apparatus cover broadly the combination of a thermally insulated "climb" chamber of low heat absorption capacity: a thermally insulated strato-chamber of high internal heat absorption capacity: and the means for abstracting heat and storing refrigeration in the strato-chamber, transferring heat rapidly from the "climb" chamber to the entire chamber and alternatively isolating them from each other, and the means to heat the "climb" chamber.

OPA Pricing Methods Established For New, Small Volume Manufacturers

WASHINGTON, D. C.—To aid new small manufacturers in starting up production during the reconversion period OPA has established two special pricing methods for producers of most consumer goods.

Manufacturers who qualify will be permitted the option of "in-line" prices or temporary ceiling prices calculated on the basis of current costs plus a specified profit margin, OPA explained.

If a new manufacturer uses the "cost" method, he is to submit estimates of total current costs, including materials, labor, other factory expenses, and selling and administrative costs to his OPA district office. To the sum of these costs the manufacturer will add a profit factor supplied by OPA, which will represent the full average peacetime profit margin of the industry that the applicant is entering.

When the new manufacturer has had three months' operating experience, he will recompute his ceiling prices, using actual costs incurred during these months in place of the estimates used in the original calculation. The new proposed ceiling prices must be filed within 30 days following completion of three months' operation, OPA said.

The original ceiling prices automatically expire at the end of five months from the beginning of production.

If a new small volume manufacturer has had ceilings established since Sept. 1, 1944, but the ceilings have proved unsatisfactory, he may use this cost-method to recalculate existing ceilings, OPA declared. In this case he would use his latest cost figures if he has been in production for three months or more.

The second alternative open to such manufacturers is to select a product comparable to the one they expect to produce, and adopt the ceiling price now in effect for the comparable article.

Twenty days after filing his proposed price with the OPA district office, the manufacturer may begin to sell at his own estimated ceiling. If additional information is requested by OPA before the price goes into effect, the applicant must wait 20 days after filing the additional information before beginning to sell.

To qualify for these two pricing methods manufacturers must be both "new" and "small."

A "new" manufacturer must show either:

(1) That he is just now starting his business, or that he started it after Sept. 1, 1944 (date of the first issuance of the WPB "spot authorization" program), or

(2) That the entire output of any business he engaged in before Sept. 1, 1944, was on contract or subcontract with government war procurement agencies or Allied governments.

To qualify as a "small volume" manufacturer, the applicant must show that both the following conditions exist:

(1) In the six months before reporting his new ceiling prices under this order, his total net sales to civilians amounted to $100,000 or less, and

(2) In the six months after reporting his ceilings, the applicant cannot reasonably expect that his sales to civilians will amount to more than $100,000.

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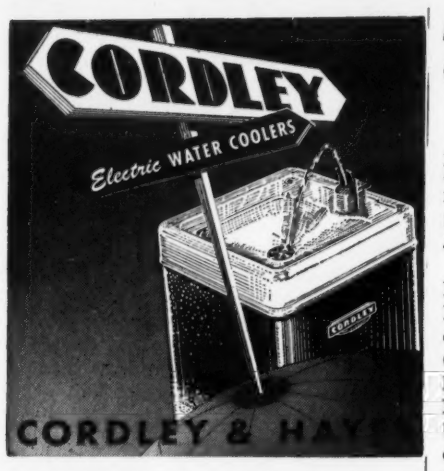

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E. A. Issa To Distribute Crosley In Jamaica

CINCINNATI—Appointment of E. A. Issa & Bros. of Kingston, Jamaica, British West Indies, as distributor for the Crosley Corp. in Jamaica was recently announced by J. W. DeLind, Jr., director of exports for Crosley.

The Issa organization is well known throughout the West Indies. It was founded by the grandfather of the present Issa brothers about 62 years ago. Wide interests and holdings include the famous Myrtle Bank hotel, department stores, jobbers and wholesalers, freight handling and warehousing, real estate, shipping, and sugar plantations.

E. A. Issa recently spent several days visiting the Crosley factories in Cincinnati.

John Rule Organizes Arkansas Distributor

LITTLE ROCK, Ark. — John H. Rule has announced the formation of a new organization, Home Appliance Distributors of Arkansas, Inc., of which he is president.

Temporary offices of the firm are at 600 W. 7th St. here, but in the fall, a modern building, already purchased, will be available for occupation.

Gibson refrigerators and electric ranges, Thor washers and ironers, Motorola radios, and West Bend aluminum cookware are slated for distribution throughout the Arkansas territory.

Other lines will be announced shortly, according to Ted Morley, vice president and sales manager.

Dealer Impresses Prospects With His Shop

In addition to giving him a lot of profitable service work, this neat repair shop operated by Fred A. Pagelow, Milwaukee dealer, proves very impressive to customers. In the left background is a metal lathe; on the bench in the foreground is a buffing wheel, wood lathe, drill press, and a grinder.

* * *

Fully Equipped Service Shop Holds Key To Milwaukee Dealer's Sales Plans Now

MILWAUKEE—Like many other dealers in electrical home equipment, Fred A. Pagelow, veteran operator of Electric Appliance Sales & Service Co. here, did not turn to other work after Pearl Harbor.

Instead Mr. Pagelow increased his efforts in servicing the appliances he had sold for many years, as well as those of any make, no matter where located. In addition to the growth of his repair business in Milwaukee and vicinity, he went after the business of other repair shops, with 17 dealers sending appliances to him for repairs, such dealers being located along the eastern shore line of Wisconsin, from practically the Illinois state line to Green Bay in Wisconsin, and west as far as Madison.

At the rear of his store, Mr. Pagelow has a completely equipped electric repair shop, with lathes and other machinery. The repair shop is open to the public; in fact, this dealer invites customers who bring in electrical appliances to come behind the scenes and see how the repair work is done, by experts, who have been in the game for many years.

In November, 1944, Mr. Pagelow decided to expand, so that when electrical appliances became available, he would be ready and his store well known.

To this end he opened a new store, with workshop at the rear, in a good residential section of Milwaukee. To fill out the display space and the shelves, Mr. Pagelow sold and displayed lamps, a radio, a refrigerator or two, and anything that showed he was still electrical appliance minded.

In season, this store went in for toy displays and novelties; anything that would bring the public to his place of business. The new store was very well lighted. Being located a few doors from a popular movie house, the store was kept lighted at night for several hours to attract home going theater crowds.

A large neon sign at the rear of the store caused most of the passersby to turn their heads to look into the store. The neon lights gave sufficient illumination to show up the displays, and this additional expense of electricity, Mr. Pagelow says, was more than paid back to him by the new customers coming to his store in the daytime.

In addition, this store is kept open a couple of nights a week for those who cannot shop in the daytime, or for housewives who want their husbands to bring in the appliances that need repairs. Some of such repairs can be done while the customer waits, and in the meantime Mr. Pagelow tells about the new appliances he is going to sell when they come on the market again.

Customers, especially the men who are mechanically or electrically inclined, are invited by the mechanic to come to the repair department and see how the work is done.

Mr. Pagelow is also a firm believer in constant advertising of his service facilities, as he will be of new appliances when they become available. Weekly advertisements appear in the principal Milwaukee home newspaper, in one of the columns near the radio programs, and such advertisements are paying good dividends, this dealer states.

Another way of keeping the name of his store before the housewife is the distribution of little souvenirs to members of women's clubs.

Cut-out capillary 73¼" long.

External adjustments for cut-out and cut-in.

Independent visual scales show exact cut-out and cut-in setting.

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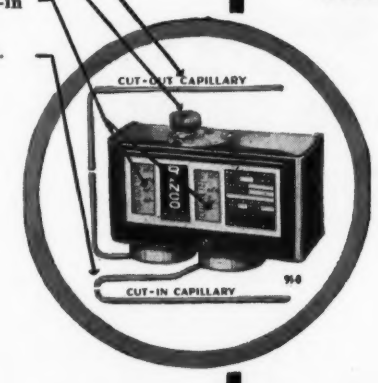

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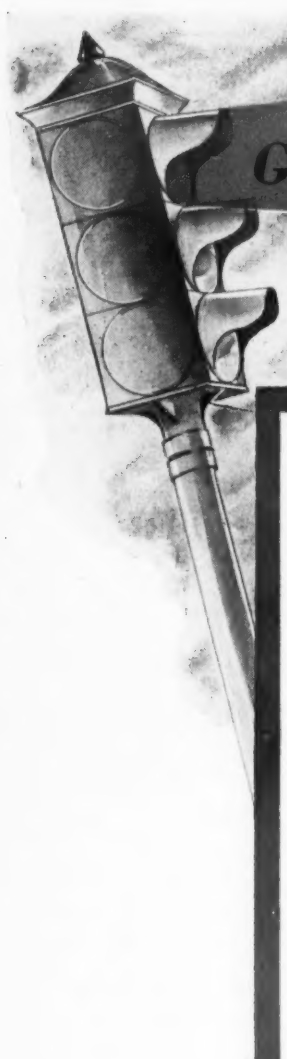
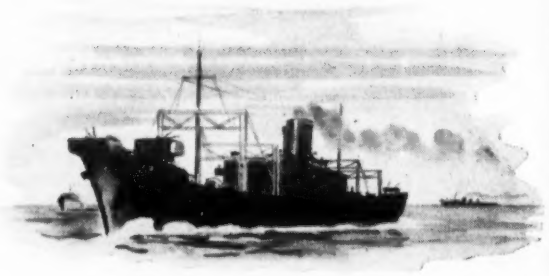


GREEN LIGHT Coming Up!

...And a New Opportunity For Established Refrigeration Dealers

It's smooth sailing to Tokyo now, with green lights all the way for fighting Yanks and their valiant allies. To the heroes who fell, and to those who have survived, a grateful world pays tribute.



And now, for American civilian industry, too, the green light is coming up. To the Albert H. Bromann, Jr. organization, that green light means quick reconversion to production of the following equipment:

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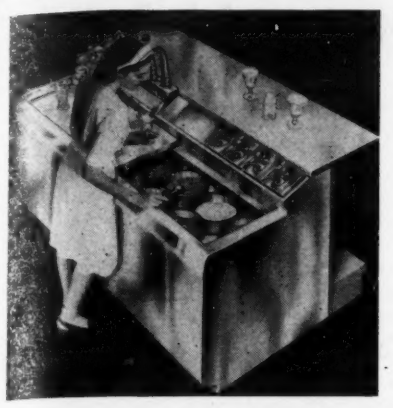
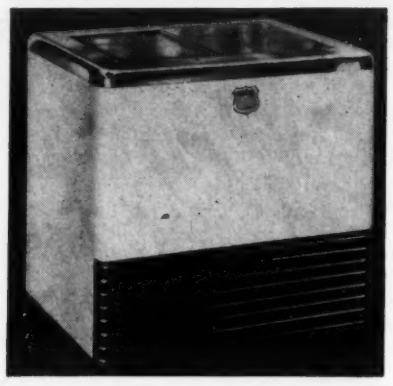
Air Conditioning & Refrigeration News

Fountain & Freezer Feature Rolling Doors





Both the new soda fountains and home freezers being introduced by Weber Showcase and Fixture Co. are equipped with the company's "Roll-A-Door," a sliding door arrangement which provides additional work surface, the company announces.

* * *

'Roll-A-Door' Principle Adapted For Use On New Weber Freezers & Soda Fountains

LOS ANGELES—Household frozen food cabinets with the same sliding door feature used in the company's "Roll-A-Door" commercial ice cream and frozen food cabinets has been announced for postwar production by Weber Showcase & Fixture Co. here.

Less weight of the doors on household cabinets, however, will allow a simple sliding door action without the rollers necessary on commercial models, according to E. V. Williams, vice president of the company. A device protected by Weber patents prevents moisture from freezing along the track and impeding door action.

The sliding door continues to provide a tabletop surface when the cabinet is open, the company points out. And, since cold air settles instead of rising, the open cabinet loses a minimum of its refrigerated temperature, working a large saving in operating costs.

The two models announced will have 4½ and 7 cu. ft. capacities. Panels of the cabinets will be heavy gauge welded Galveneal, finished in white Dulux, according to specifications. Its top will be one-piece heavy gauge stainless steel, with rounded edges and corners.

The "Roll-A-Door" design was first introduced by Weber in 1938, after seven years of consumer surveys, engineering production and laboratory testing.

Designed originally for use of the U. S. Army supply services, Weber's new soda fountains incorporate the sliding door principle on the three models in the line.

First introduced seven years ago in ice cream and frosted food cabinet equipment, the "Roll-A-Door" substitutes sliding stainless steel doors for the conventional flip-flop or lift-off lids. The doors move on specially treated hard rubber rollers on a stainless steel track, and a patented device prevents moisture from freezing along the track, claim Weber officials.

"The flat, table-top surface of the rolling doors will replace the almost wasted space formerly taken up by the flip-flop or lift-off lids," says the Weber company. "Impediments offered by lids of the older type had left that area almost useless. The uncluttered, work-table top provided by the rolling doors of the new Weber fountain equipment will provide extra room for mixed drinks, sodas, sundaes, and other fountain services."

Another change in postwar fountains will provide 35% more storage space in the ice cream compartment than was available in older types, allowing cans to be placed closer together and better utilizing all available space, according to Weber officials, who add that new fountains will be narrower, shortening the "reach" of fountain workers by about 3 in. Fountain height along the interior working edge will also be raised approximately 2 in.

"Roll-A-Door" fountains will be available in 33, 43, and 63-gallon sizes in the creamer section. Each will contain a 13-gallon compartment for brick ice cream as part of its overall storage capacity. The 33-gallon size will have an attached sink section with two standard-sized sinks and a smaller auxiliary sink. The two larger fountains will have separate sink sections, 4 ft., 6 in. in length and equipped with three sinks.

Baubie Named To Head Westinghouse Publicity

PITTSBURGH—George H. Bucher, president of the Westinghouse Electric Corp., has announced the appointment of James A. Baubie as director of the public relations department of the company.

Since November, 1943, Mr. Baubie has been assistant manager of the public relations department. He now assumes responsibility for the company's activities in this field, which were formerly under the direction of G. Edward Pendray, assistant to president. Mr. Pendray has resigned to open offices in New York as a counsel in public relations.

Activities included in the department which Mr. Baubie now directs embrace general publicity for newspapers and magazines, technical publicity in trade and technical press, the company's youth program and four company publications—The Westinghouse Engineer, Westinghouse Newsfront, Westinghouse Magazine, Stockholders' Quarterly.

Wright Appointed C-H Asst. Sales Manager

MILWAUKEE—F. A. Wright, who has been associated with Cutler-Hammer, Inc. here since 1927, has been promoted to assistant general sales manager, announces P. S. Jones, vice president in charge of sales.

Originally a member of the company's sales staff in St. Louis, Mr. Wright joined the Milwaukee headquarters in 1939 as manager of resale sales. Since then he has been active in development and sales work on new products.

R. E. Lowey To Manage Booth Frozen Foods

CHICAGO—R. E. Lowey has been promoted to manager of Booth Fisheries Corp.'s frozen food division, announces C. A. Linder, vice president and treasurer. He succeeds E. H. Logan.

INSULATING FACTS

FOR COLD STORAGE AND LOCKER PLANT OPERATORS

● Whether you are building or remodeling your cold storage or locker plant, you'll find valuable information in this "HAND BOOK ON COLD STORAGE CONSTRUCTION." It tells how to figure heat loss, how to estimate amount of insulating material needed for a job. It gives helpful details on construction and vapor-proofing. It also explains in detail how and why Redwood BARKWOOL gives you these nine vital advantages:

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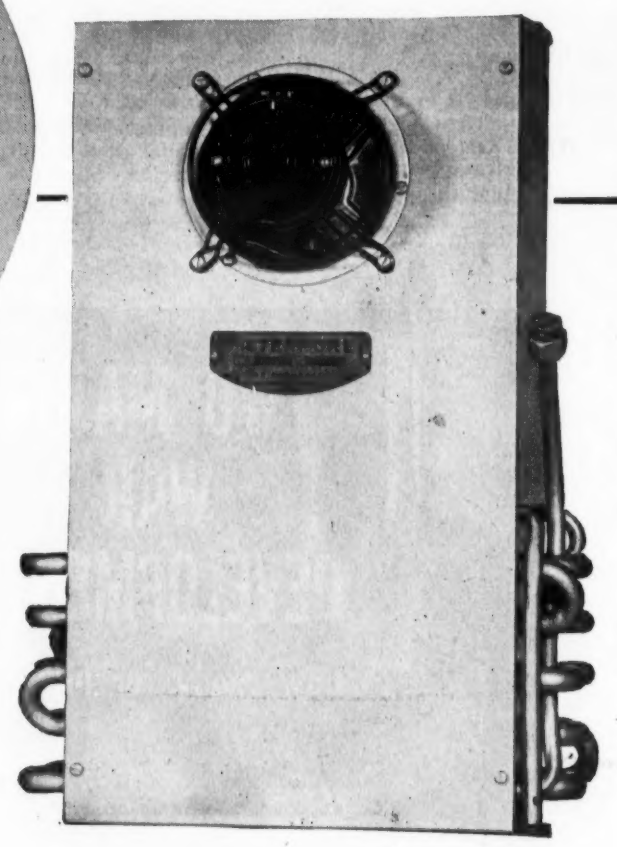
REDWOOD BARKWOOL INSULATION
A PRODUCT OF
REDWOOD FIBRE PRODUCTS COMPANY, Inc.
SANTA CRUZ, CALIFORNIA
REDWOOD BARKWOOL INSULATION

Post-War
FILTERPURE BACK BAR UNITS



They're New and Different—
With These Important Features:

1. Extremely compact—built especially for back bars
2. Centrifugal blower circulation
3. Quickly and easily installed
4. Even temperature throughout entire fixture
5. Two units—for all size back bars
6. Exclusive Betz coil construction

Let us send you complete information about our post-war line of cooling units.

For Information, Call or Write— BETZ CORPORATION
HAMMOND, INDIANA

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REFRIGERATION SUPPLIES, INC.
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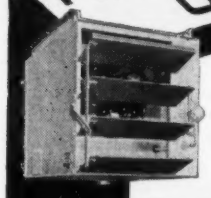
Tampa Charlotte
"The South's Largest Refrigeration Supply Jobber"

REFRIGERATION ACCESSORIES
• Instantaneous Water and Beverage Coolers.
• Oil Separators.
• Two-Temperature Valves.
• Accumulator Heat Exchangers.
• Equalizer Tanks.
• Controlled Temperature Photographic Processing Units.
• X-Ray Refrigerating Units.
TEMPRITE PRODUCTS CORPORATION
47 PIQUETTE AVENUE DETROIT 2, MICHIGAN

HOWELL MOTORS

ELECTRIC MOTORS FOR INDUSTRY SINCE 1915
HOWELL ELECTRIC MOTORS COMPANY · HOWELL, MICH. · REPRESENTATIVES IN ALL PRINCIPAL CITIES

KRAMER FREEZING OVEN



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UNIT COOLER
WITH SELF-CONTAINED
ELECTRICAL DEFROST
(below 32°)
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'Revitalizing Sales Forces' Seen As Great Problem of Marketing in Immediate Future

NEW YORK CITY—Preparations are being made by marketing executives "for decisive action in the coming period of intensified competition," according to the views of key executives in that field as summarized in the annual report of the American Management Association, made public recently by Alvin E. Dodd, president.

"Return to a peacetime economy," the report declares, "will bring about a far more discriminating market, with the precision yardsticks demanded by most war materials replaced by yardsticks of quality, price, and service.

CUSTOMER GOODWILL

"Marketing men will face the problem of winning back the goodwill of customers who feel they have been dealt with unjustly during the years of shortages, while concurrently seeking sound relationships with new customers—and they will have to do all this notwithstanding the fact that in many fields the continuation of voluntary rationing by the producer will be necessary.

"In embarking on the distribution of new products or new models of old products, marketing men will have to add new wisdom and judgment to improved marketing research. They will be bedeviled with the choice of devoting their production wholly to nationally advertised products or only in part, the balance going into the production of private brands. A whole new set of conditions will confront companies that have in the past found healthy markets abroad, while companies lacking export experience will be confronted with the need for mastering its intricacies.

"Perhaps the marketing executive's great problem will be that of revitalizing sales forces that have become steeped in attitudes foreign to that of selling. The sales staffs of many companies are depleted; a sizeable recruiting job will be required. The task of reactivating the sales force will require intensification of sales training programs and, more pertinently, better sales training techniques.

COMPENSATION FOR SELLING

"Finally, many companies will reexamine their sales compensation methods, with an eye not only to undoing some of the unhealthy practices that developed during the war, but also to devising standards that are more fair and beneficial both to the salesmen and the company."

Besides marketing executives, the American Management Association, in preparing its report, also asked key executives in the fields of production, personnel, finance, office management, insurance, and packaging, for projections of the future. The replies, the report said, made it evident that business does not regard reconversion as a return to prewar days but as an advance into new territory.

"There is a deep conviction," the report asserted, "that management must become more sensitive to changing social concepts and ready its thinking and its operation to facilitate rapid adjustment to these changes. Agreement is universal that the overwhelmingly great problem of our times will be that of maintaining a continuously high level of employment, and that to that end the major contribution must come not from government but from business."

"Production managers," it was declared, "are aware that, although emphasis is shifting from production to sales, their function will experience loss of drama but not of importance, for intensified competition will emphasize the need for cost reduction if the company is to maintain its competitive position in spite of increased costs of labor and materials.

"The production executive's first concern will be that of reestablishing a proper relationship between unit cost and production and this will involve such action as reshuffling of the managerial staff, management training, development of better supervisors, elimination of marginal workers, improved employe training, union cooperation.

"During the immediate future production men will be called on to devise more effective layouts, establish efficient methods, and train operators to produce at a cost that will permit prices within governmental regulations, at a minimum loss, until full volume with its attendant economies can be attained. Difficulties, however, are to be anticipated in procuring many kinds of capital equipment, thus denying some manufacturing economies."

PERSONNEL PROBLEMS

Depicting personnel managers as foreseeing "a period that will put to the sternest test the intelligence and good intentions of both management and labor, as the dislocations attendant upon reconversion to a peacetime economy threaten to precipitate friction, bitterness, and conflict," the report added:

"The most immediate looming problems are those presented by the returning veteran, involving his retraining and reorientation, the situations his return may create among existing personnel. Perhaps more important, however, on a long-range basis, will be the problems deriving from the determination of union leaders to maintain and extend their economic gains."

Richmond Electric Corp. Plans Complete Line

RICHMOND, Va.—Richmond Electric Corp., 418 East Main St. here, has announced that it will carry a complete line of home appliances and commercial refrigeration.

Miserocchi Manages G.E Apartment Sales In N.Y.

NEW YORK CITY — Henry A. Miserocchi has been appointed manager of apartment house sales for the New York Appliance Distributing Branch of the General Electric Co., Earle Poorman, manager of the branch, has announced.

Mr. Miserocchi is well known to real estate operators throughout the area, having handled General Electric refrigerator sales in the apartment house field for over 10 years.

He comes to his new assignment from the WPB where he was supervisor of the New York District Appeals Division and "Spot" Authorizations.

Robert Hix Joins Gotham Instrument

CHICAGO—Robert H. Hix, who for over 20 years was associated with the Tagliabue Co., has recently been appointed the Midwestern representative of the Gotham Instrument Co., manufacturer of indicating, recording, and controlling thermometers for industrial use.

The Gotham company is now represented by agents and dealers in all principal cities of the United States, Canada, and the Latin American countries.

They will open branch offices in various industrial cities, according to a statement by Walter J. Halpern, general manager.

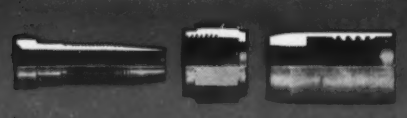
Foxboro Names Williams To Engineering Sales

FOXBORO, Mass.—Clarence Leslie Williams has joined the staff of sales engineers for the Foxboro Co., industrial and measurement and control instrument manufacturer, and will be attached to the company's New York office, 420 Lexington Ave.

Following his graduation from Stevens Institute of Technology at Hoboken, Mr. Williams obtained diversified business experience before coming to the Foxboro Co.

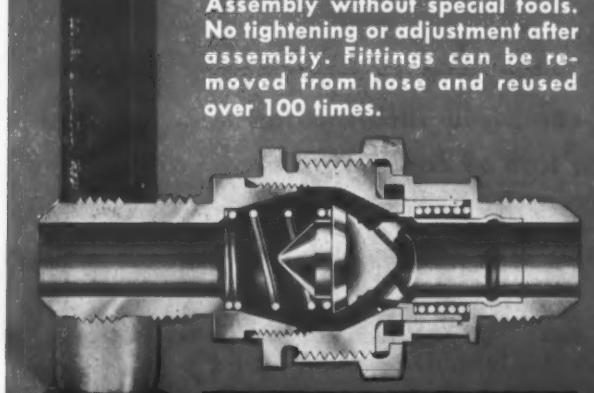
TWO MAJOR WAR DEVELOPMENTS
now ready for industry

1. Aeroquip Hose Lines* with detachable and reusable fittings simplify the supply problem and save valuable time, thus helping our armed forces on all fronts.



3 PIECES (each replaceable)

Assembly without special tools. No tightening or adjustment after assembly. Fittings can be removed from hose and reused over 100 times.



2. Aeroquip Self Sealing Couplings* allow disconnection of liquid carrying lines without loss of fluid and reconnection without inclusion of air.

*STANDARD EQUIPMENT ON U. S. ARMY AND NAVY COMBAT AIRCRAFT

AEROQUIP CORPORATION
JACKSON, MICHIGAN, U. S. A.

Here's the Easiest Way to Find a V-Belt for ANY Requirement

With Dayton V-Belts you can meet all power transmission requirements for all types of household appliances and small machines.

Just be sure you have one of these two Dayton catalogs. They'll save you time and trouble . . . solve your belt selection problems at once. To find the belt required, you turn to the simplified tables in these catalogs and quickly select the drive which meets specific requirements, it's just as easy as that!

And when you specify and sell Dayton V-Belts you give your customers a belt that performs better, lasts longer. The patented construction of these belts gives greater strength and endurance. They won't squash, twist, vibrate, stretch. They pull better and operate quieter.

Write today for the catalog designed for you.

THE DAYTON RUBBER MANUFACTURING COMPANY
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V-Belts by
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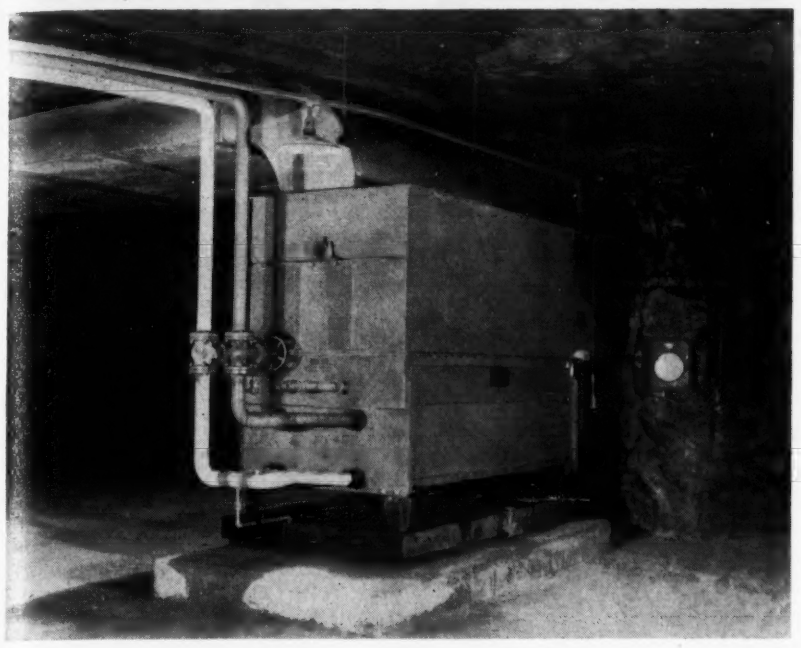
THE MARK OF TECHNICAL EXCELLENCE IN SYNTHETIC RUBBER

48 Units Cool World's Largest Cold Storage



The famous War Food Administration refrigerator-cave at Atchison, Kan., is the largest cold storage plant in the world, comprising about nine million cubic feet of refrigerated space. The natural cave temperature of about 55° F. has been reduced to a few degrees above freezing by the installation of 48 coolers, manufactured by the Niagara Blower Co., Buffalo, N. Y.

Each handles 19,000 c.f.m. of air and is rated at 13½ tons refrigeration capacity based on the circulation of brine at a temperature of 20° F. through the cooler coils. Three compressors, each of 250 tons rating, furnish refrigeration for chilling the brine.

The coolers, like the one illustrated, are located at intervals throughout the cave and are furnished with short air ducts to provide the uniform distribution of cold air. The total air handled is nearly a million cubic feet per minute. Installation was made by J. F. Pritchard & Co. of Kansas City.

Aluminum Suggested for Small Motor Brackets

WASHINGTON, D. C.—Manufacturers of fractional horsepower motors have been advised by the War Production Board that aluminum is a recommended substitute for gray iron castings for motor end brackets.

In explanation of the recommendation, WPB said that gray iron castings have been one of the bottlenecks reported by motor manufacturers in the production of critically short fractional horsepower motors.

This shortage will continue, WPB stated, since requirements are increasing and the supply is showing no marked gain. Part of the difficulty is attributed to the fact that working conditions in the foundries hinder peak summer production.

In light of the increased need for fractional horsepower motors because of reconversion requirements, WPB has suggested that the industry investigate the use of alternate materials as a solution to the problem. Several companies, WPB said, have been working successfully with aluminum, which promises long range possibilities, as well as answering the immediate need for material.

Western Engineering Formed by Miller

LOS ANGELES—Western Engineering & Sales is the firm name under which B. H. Miller has published a certificate that he is conducting an air conditioning and sales business at 6052 Harold Way, here.

Member of the National Refrigeration Supply Jobbers Association

Your refrigeration parts and supply house in Central New York and Northern Pennsylvania

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CENTRAL SERVICE SUPPLY CO.

516-18-20 E. Erie Blvd., Syracuse, N. Y. Phone 5-4000
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ANSUL ICE-X

TRADE MARK REG. U. S. PAT. OFF.

IS THE OLD STANDBY FOR THE SWIFT, SURE PERMANENT ELIMINATION OF MOISTURE TROUBLES!

any place in the system... instantly eliminates ice at expansion valve... cannot cause any damage to refrigerant, oil or any of the parts of the system. Ice-X is the original, fully patented, liquid formula for dehydration.

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EXCLUSIVE NATIONAL DISTRIBUTOR
THE HARRY ALTER CO. 1728 S. MICHIGAN AVE. CHICAGO 16, ILLINOIS

JOBBERS: WRITE FOR SPECIAL PROPOSITION!

Operations are safer with FRICK Air Conditioning

Hospitals are finding year 'round air conditioning an indispensable aid in operating rooms. Patients, doctors, and staff are all greatly benefited by its controlled temperatures and invigorating freshness.

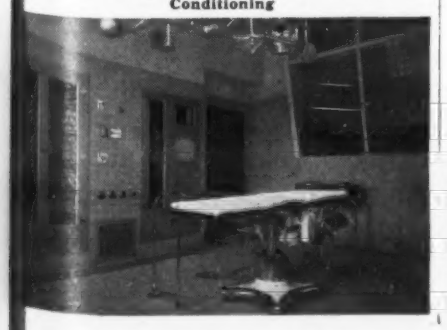
Years of experience in this work have taught us how best to satisfy the special requirements of operating rooms.

High relative humidity is necessary to carry away static electricity; explosion-proof motors and switches are used; fresh conditioned air is admitted in unusually large proportions: controls are automatic, but can be instantly adjusted by the surgeon. Drafts, noise, dust, and unsteady conditions are avoided.

Does your hospital have air conditioning? Would you like to get literature on the subject? Write to

DEPENDABLE REFRIGERATION SINCE 1882
FRICK CO.
WAYNESBORO, PENNA. U.S.A.

The operating room at the Detroit Osteopathic Hospital, among many others, has Frick Air Conditioning



Company Earnings

Reynolds Metals Co.

NEW YORK CITY — Reynolds Metals Co. and subsidiaries has reported consolidated earnings for the first six months of 1945 at $12,983,476, as compared with $9,946,057 for the comparable period of 1944.

After a $2,300,985 deduction of special amortization emergency facilities, and taxes on income amounting to $7,831,000, the consolidated net profits of the six months ending June 30, 1945 were listed at $2,851,491, compared with $2,113,603 for the same period last year, after similar respective amortization and tax deductions of $2,219,854 and $5,612,600.

After provision for preferred stock dividend requirements, these earnings were equal to $2.652 per share on $1,023,662 shares of common stock outstanding.

C.I.T. Financial Corp.

NEW YORK CITY—Directors of C.I.T. Financial Corp. have declared a quarterly dividend of 50 cents per share in cash on the common stock, payable Oct. 1 to stockholders of record at the close of business Sept. 10.

Nash-Kelvinator

DETROIT — Directors of Nash-Kelvinator Corp. have voted a dividend of 12½ cents per share on outstanding capital stock, payable Sept. 28 to stock of record at the close of business on Sept. 5.

Philco Corp.

PHILADELPHIA — The board of directors of Philco Corp. has declared a dividend of 20 cents per share of common stock payable Sept. 12, 1945, to stockholders of record Aug. 28.

FOOD MUST BE CONSERVED

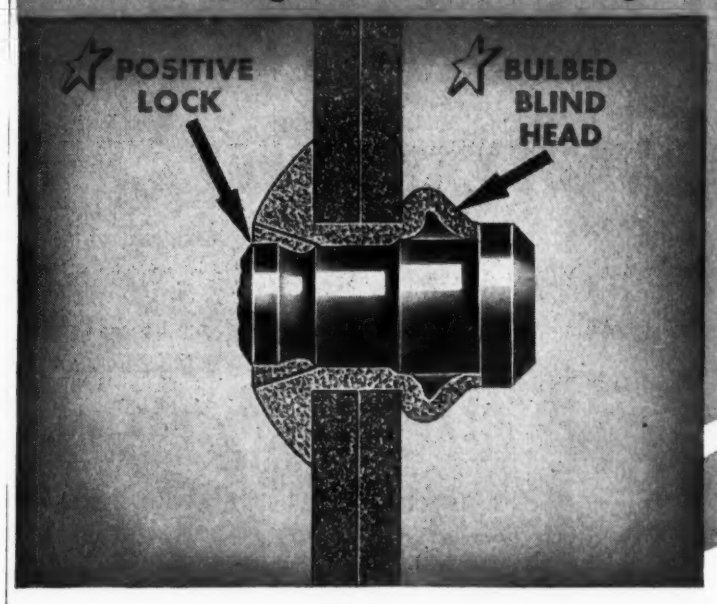
Refrigeration today is performing a vital service by guarding and preserving for future use, priceless food which might otherwise be wasted. Write for literature.

GENERAL REFRIGERATION DIVISION

Yates-American Machine Co. Beloit, Wis.

Kipman AUTOMATIC REFRIGERATION

Two Big Reasons WHY HUCK BLIND RIVETS ARE EXCEPTIONALLY STRONG...SAFE... DEPENDABLE



POSITIVE LOCK
Gives Unusual Strength; Holds Pin Securely in Sleeve

DURING the driving operation, after the blind head has been formed, a locking collar at the outer end of the rivet sleeve is automatically forced into the conical space formed by recess in head of sleeve and locking groove in pin. This rigidly and permanently locks the pin to the sleeve, so that the driven Huck Blind Rivet is substantially the mechanical equivalent of a one-piece ***solid*** rivet.

In many cases the thickness of the sheets is such that the bearing value is insufficient to develop the full shear strength of the rivet. Under such conditions the great increase in rivet tensile strength resulting from the lock avoids joints loaded in single shear becoming critical and failing in rivet tension.

Comparative tests of identical Huck Blind Rivets with the lock both driven and undriven show that this positive lock increases the ultimate strength of a joint loaded in single shear from 10.3% in the case of thick sheets (joint considered critical in rivet shear), to as much as 63.3% in thin sheets (joints considered critical in sheet bearing).

In addition, this positive lock definitely prevents the pin from working loose under any conditions of vibration or fatigue loading—regardless of whether the rivet has been driven in a properly-sized or oversize hole.

BULBED BLIND HEAD
Provides Tight Grip, with Stronger, More Rigid Joint

BECAUSE of special graduated work-hardening during manufacture, the end of the rivet sleeve upsets to form a ***bulbed*** head rather than flaring out into a tulip head. This eliminates any possibility of splitting the blind head.

At the start of blind head formation, the inner part of the bulb tries to form within the hole. As the bulb folds toward the sheet, the resulting leverage action clamps the sheets together very tightly.

Flattening of the bulb against the sheet provides an ample area of contact between blind head and sheet, assuring great strength and rigidity.

● *Illustrated manual (Bulletin 451) gives full details of these and other exclusive features, together with complete working data. Write for your free copy today.*

2480 BELLEVUE AVENUE Huck MANUFACTURING CO. DETROIT 7, MICHIGAN

AMINCO
WATER REGULATING VALVE

Quiet • No Chatter • Practically friction-free • Maximum flow with minimum head pressure differential •

No. 614

Double Bellows Seal • Removable Body Seat • For all refrigerants —except ammonia • Standard connections 3/8" x 3/8" F.P.T. • Pressure Controlled •

Aminco No. 614 water valve regulates the amount of water passing through water-cooled condensers. . . .

This valve is helping to keep systems in tip-top condition and because of its close control action it provides insurance of longer life for water-cooled condensers.

Sold, as always, through jobbing channels, it is an invaluable aid to the service-man concerned with keeping installations operating at full efficiency.

For more details see Bulletin No. 15.

AMERICAN INJECTOR COMPANY

1481 Fourteenth Avenue DETROIT 16, MICHIGAN

Van D. Clothier, 1015 E. 16th St., Los Angeles, Calif.
George I. Boone, 739 G. M. Bldg., 1775 Broadway, New York 19, N. Y.
William H. Cody, 2nd Unit, 10th Floor, Santa Fe Bldg., Dallas, Texas
Export: Borg-Warner International Corp., 310 S. Michigan Ave., Chicago, Ill.

Baker Heads Honeywell Branch In Syracuse

MINNEAPOLIS — Appointment of Russell A. Baker as manager of the Syracuse branch office of the Minneapolis-Honeywell Regulator Co. has been announced by C. B. Sweatt, vice president.

Mr. Baker succeeds Joseph W. Stevens who has left the company to become sales manager of the Cyclotherm Division, Ames Iron Works, Inc., Oswego, N. Y.

A graduate of the University of Minnesota where he received his degree in architectural engineering, Mr. Baker joined Honeywell in March, 1945. After training in the company's sales and engineering school he worked in Dayton, Cleveland, and Chicago branch offices as engineering consultant and salesman.

Levi & Antriatch Join Buffalo Distributor

BUFFALO, N. Y.—Appointment of Richard J. Levi as sales manager and Nick Antriatch as service manager has been announced by Ben Kulick, president of Fay-San Distributors, Inc., distributor of Admiral Corp. products.

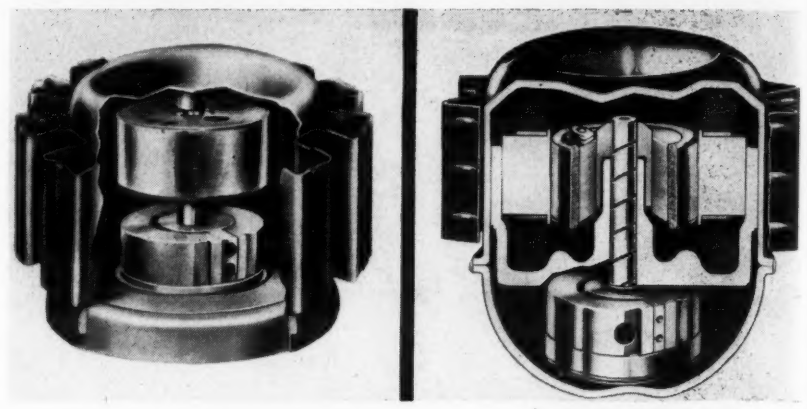
Mr. Levi has just been released as field director of the American Red Cross, following service in Great Britain as executive supervisor in charge of the entire Red Cross Field Service operation there.

Mr. Antriatch was recently released from the Army Signal Corps where he had been a radio technician.

Servicing Frigidaire Meter-Miser Units

Instalment No. 5

18—Internal Noises

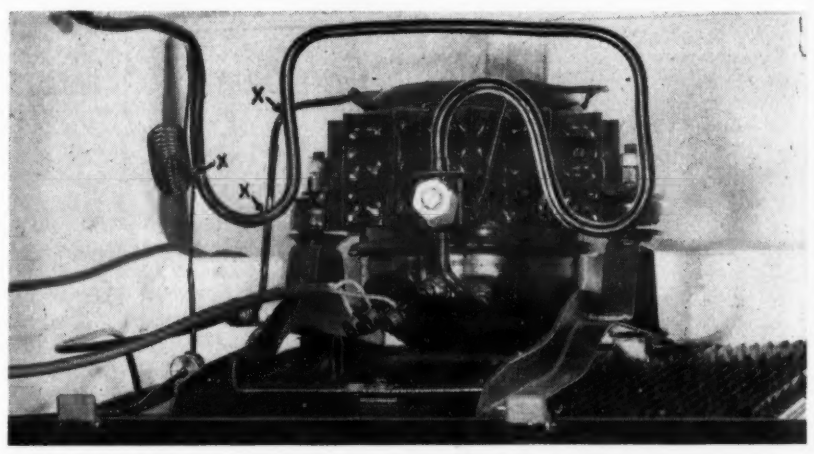


Flat Base Convex Base

Because of internal design the noise level of "flat-base" Meter-Misers (built 1933 to 1937) is somewhat higher than the "convex-base" type (built 1938 to 1942).

A user with one type may visit a user who owns the other type. She may notice that the sound of the one is different from hers at home. She thinks something is wrong, and the next thing there is a noise complaint. Be patient and understanding in your explanation of the difference when talking with customers.

19—External Noises



A rattle is usually the result of a refrigerant line being out of position. Carefully reform the line to relieve the strain, being careful not to form a new strain in another part of the line.

Another cause is cabinet location. It may be unlevel. The back may rest against a hollow wall that acts as a sounding board. The floor may be weak and poorly supported. To locate a noise of this type, ask the customer's permission to move the cabinet to another location in the kitchen temporarily. If this eliminates it, arrangements can be made to correct the condition, or leave the cabinet in its new location.

Can YOU service fractional-hp motors QUICKLY and PROFITABLY without skilled repairmen?

YOU CAN if the motors are G-E—and if you use our Factory Service Plans

If you're in the business of servicing electric-motor-driven appliances, you're undoubtedly aware of the increasing demands for electric-motor service. Perhaps, too, you are finding it difficult to meet these demands because of a scarcity of trained repairmen. But despite a shortage of skilled manpower, you can get your share of this profitable, growing service business if you are in a position to give *quick, satisfactory* service.

These time-tested Plans enable you to repair or replace practically any G-E fractional-hp motor that has become inoperative, regardless of the type or make of appliance on which it is used. What's more, you can provide this service *quickly, economically,* and *expertly* without skilled repairmen. G.E. does the actual repair work *promptly* and *reasonably,* and you know your profit beforehand.

Back of these Plans is an exchange stock representing more than 1000 different motor models, to keep in operation the G-E motors on several million appliances.

SEE HOW THESE SERVICE PLANS HELP YOU

Investigate these simple, profit-making Factory Service Plans. Like hundreds of other dealers, you'll find they're a sure way of maintaining business now; a means of building and holding trade for the future. Ask your appliance manufacturer or distributor for details today. Or just fill in and mail the handy coupon. You'll be glad you did!

FRACTIONAL-HP MOTORS

BUY WAR BONDS

GENERAL ELECTRIC

HERE ARE THE PLANS

1. THE EXCHANGE PLAN
Covers the most commonly used types of G-E fractional-horsepower motors. Makes possible immediate replacement, from G-E field stocks or from your own buffer stock. Replacement motors carry the G-E new-motor warranty, except for finish.

2. SPECIAL REPAIR SERVICE PLAN
Provides for factory repair of semistandard G-E fractional-hp motors not covered by the EXCHANGE PLAN, at established prices. Enables you to make quick, accurate, on-the-spot estimates. Repaired motors carry the G-E new-motor warranty, except for finish.

3. REGULAR REPAIR PLAN
Covers fractional-hp motors not included in either of the other two plans, except extremely old or obsolete models. Inspection is made at the factory, and a cost estimate is submitted before work is started. These motors also carry the G-E new-motor warranty, except for finish. This plan rounds out this G-E service and enables you to handle repairs on practically any G-E fractional-horsepower motor.

General Electric Company, Section 700-78C
Schenectady 5, New York

Please send me a copy of your booklet which describes the Factory Service Plans that will help me service G-E fractional-horsepower motors.

Name .....
Company .....
Address .....
City ..... State .....

Ask Your Jobber for
HASCOBILT *Parts*
SUCTION *and* DISCHARGE VALVE, DISC, REEDS *and* SPRINGS
for Conventional and Hermetic Type Compressors

HASCO, INC.
GREENSBORO, N. C.

If your jobber can't supply you, send for illustrated catalog and price list.

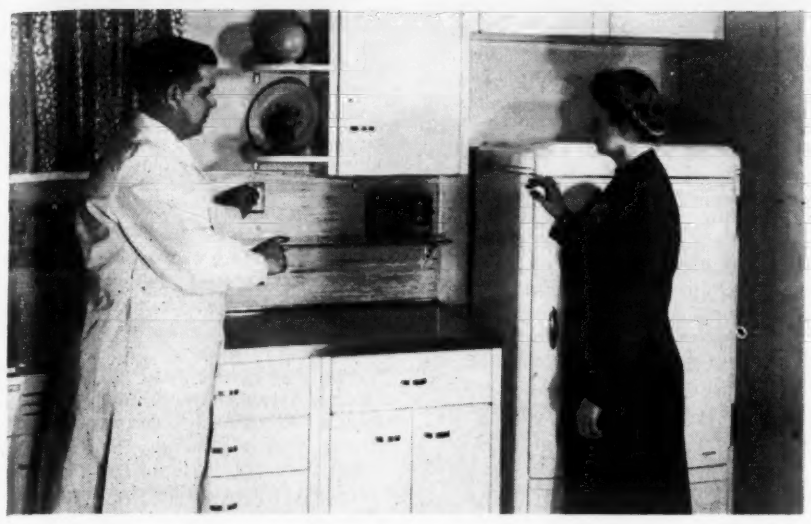
WANTED

REFRIGERATION PRODUCTION EXPERTS

Leading manufacturer of refrigeration and air conditioning heat exchanger equipment needs several men versatile in handling the engineering, design, and assembly of refrigeration products. Write, giving age, experience, and salary expected. Our employes know of this ad. Box 1752, Air Conditioning & Refrigeration News.

Servicing Meter-Miser Systems

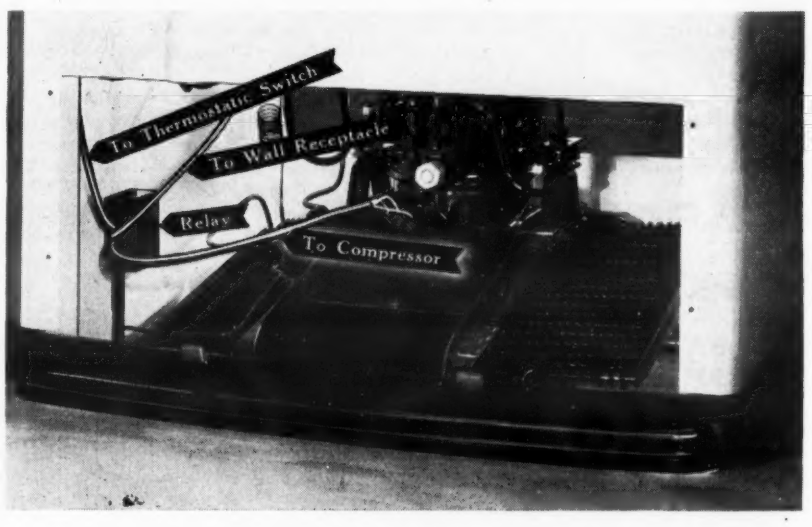
20—*Radio Interference*



The operation of the Meter-Miser motor itself cannot cause radio interference, because it is an induction motor and has no commutator or brushes.

However, when the relay makes or breaks contact in starting or stopping the motor a slight click is sometimes heard in the radio—just as when a light switch is turned on or off. A proper explanation will usually correct this complaint very quickly.

21—*Controls and Wiring*

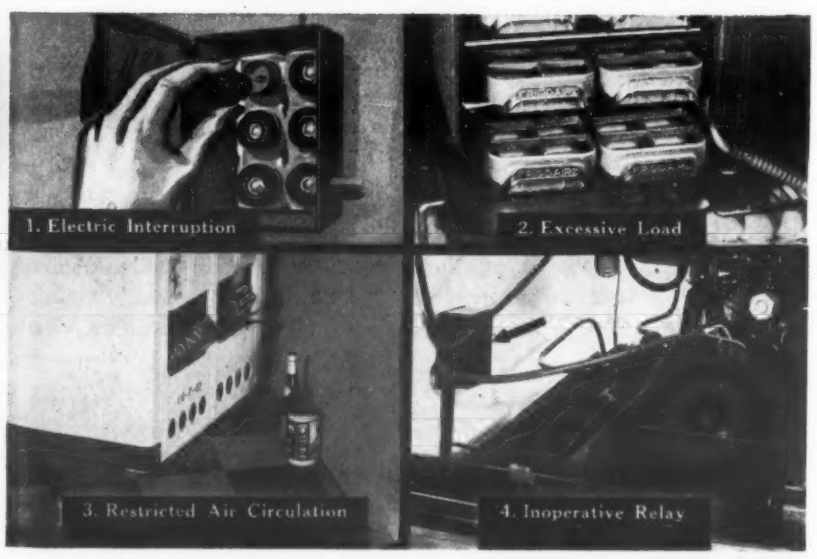


Sometimes a motor won't run because of a short in the controls or wiring.

Sometimes a user may say she feels a slight tingle of electricity when touching the cabinet, which may be caused by a ground.

With complaints of this type, each section of wiring and each control should be carefully checked.

22—*Motor Complaints*



Motor complaints are seldom caused by the motor itself. A heavy load of appliances on the same line may blow a fuse. The user thinks something is wrong with the motor and calls for service. That's why it's important to ask about the fuse before going out on a call.

Sometimes a user fills all the ice trays with warm water and places them in the freezer right at the end of an operating cycle. This warms the thermostat bulb and makes the switch kick in before the internal refrigerant pressures of the unit are sufficiently equalized to permit the motor to start. To protect the motor, the relay keeps kicking in and out until the pressure is equalized. You can often save the user a call on this complaint by asking a few questions over the telephone.

Restricted air circulation over the condenser will cause the unit to act in the same way, because it tends to keep the head pressure higher than normal.

Sometimes the relay itself may be at fault. Instead of automatically switching from the starting to the running winding, it may stay on the starting winding. This makes the overload protector kick in and out. Or the relay may fail to function entirely.

TO INCREASE PRODUCTION

• YOU Can Obtain Greater Refrigeration Capacity from your Present Compressor by using **NIAGARA DUO-PASS AERO CONDENSER**

This is possible because you use outdoor air as the cooling medium with the extra benefit of evaporative condensing! Condensing temperatures are lowered; condenser capacity is increased; head pressures are reduced —additional compressor capacity is the result.

Only the patented NIAGARA Duo-Pass makes this gain permanent because no other evaporative condenser lowers condensing temperatures to the point where deposits do not accumulate on condenser tubes.

This does away with loss of time for cleaning and assures always full capacity.

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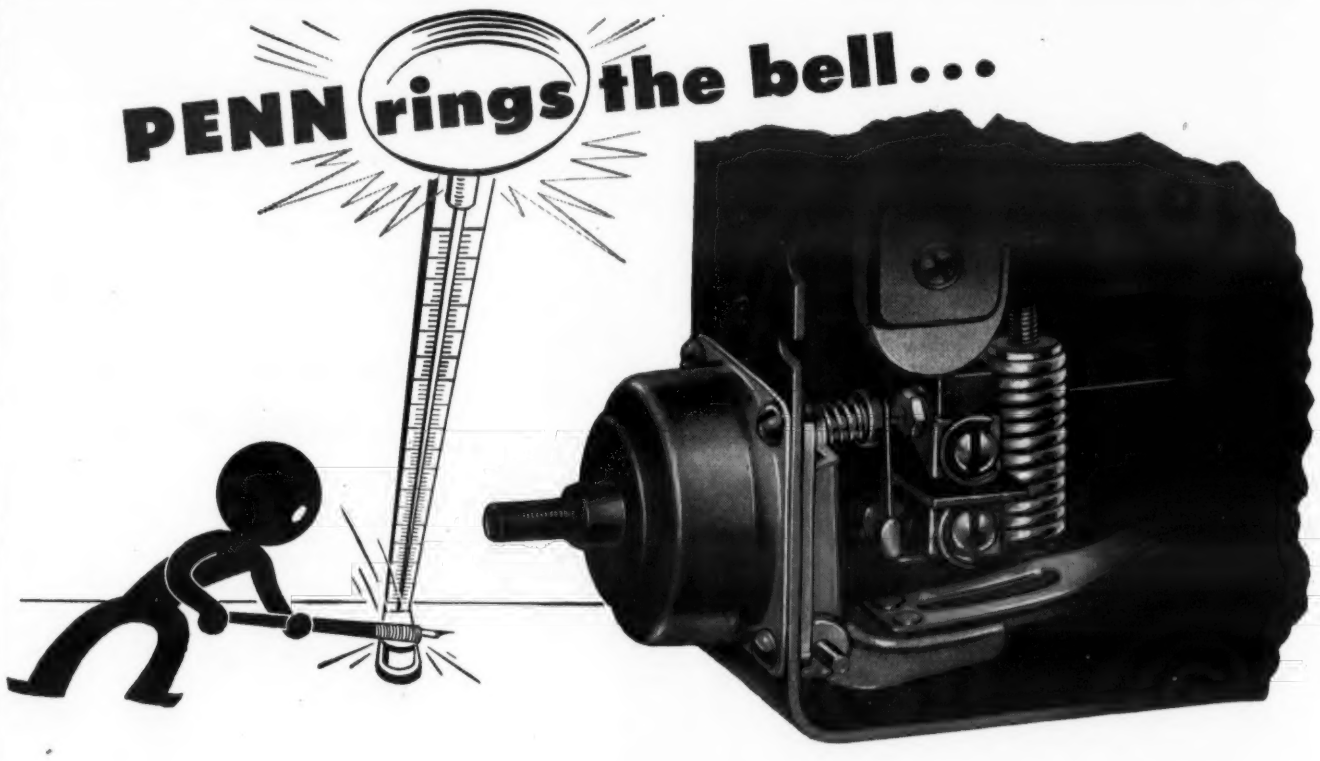
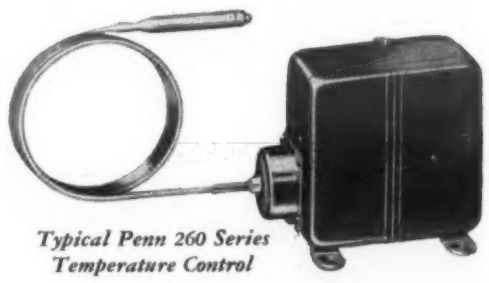


In protecting food supplies!

• Critical food supplies are subject to spoilage and waste . . . whenever there is any interruption in required cooling. Yet little troubles can crop out in even the best commercial refrigeration systems. These troubles may be unimportant in themselves but they can cause abnormal "warm-up." To warn against any excessive temperature rise, PENN has developed its Auxiliary Alarm Contact Structure.

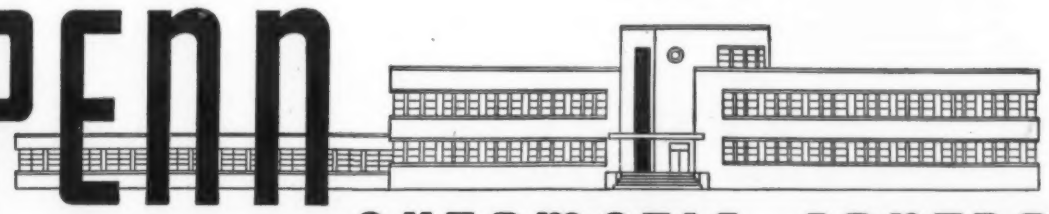
This temperature detective *rings a bell, flashes a light* or brings some other warning device into operation . . . when the temperature rises above the predetermined safe maximum. Providing added protection for *deep freezers* and *commercial low temperature boxes* . . . this device is available in all standard temperature and pressure controls.

Send for full details on the PENN Auxiliary Alarm Contact in Bulletin R-260-D. You'll find other vital data on PENN Refrigeration Controls, too. Write *Penn Electric Switch Co., Goshen, Ind.* Export Division: 13 E. 40th Street, New York 16, U.S.A. In Canada: Powerlite Devices, Ltd., Toronto, Ont.



Typical Penn 260 Series Temperature Control

PENN



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Has openings for experienced refrigeration salesmen to work abroad. Knowledge of foreign languages helpful. Excellent money making possibilities. Write giving full details experience and references.

Box 1794 Air Conditioning & Refrigeration News

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What's New

Sylvania Introduces 2 Germicidal Lamps

SALEM, Mass.—Ultraviolet radiation to destroy airborne bacteria and to prevent contamination of foods and sterilized articles is provided by germicidal lamps now being manufactured by Sylvania Electric Products, Inc. here.

Two types are offered in 15 and 30 watt T-8 sizes. Type A is suitable for school rooms, homes, dairy barns, poultry houses, hospitals, lavatories, and in the sterilization of drinking glasses. Type B is suitable for meat storage refrigerators, air conditioning ducts, food packaging, canning, bottle and jar filling operations, and other applications where there is air turbulance, exhaust canopies, or provision for worker protection against the higher ozone output of Type B lamps.

Irradiating the upper third of a room where people are exposed for even short periods is necessary, the company says. Germicidal lamp applications should be carefully engineered to eliminate direct viewing by the naked eye, yet in such a manner as to utilize maximum radiation, it is advised.

Indirect systems of radiation produce best results when aluminum or polished chrome reflectors are used to shield the lamps from the eye and to reflect ultraviolet rays upward efficiently, believes the company. The fixtures may be suspended from the ceiling or mounted on the walls in an indirect cove section in any position.

Both Type A and Type B germicidal lamps are rated at 2,500 hours life and may be operated with the conventional ballasts, sockets, and starters used with standard 15 and 30 watt fluorescent lamps.

New Hot Plate Seals Frozen Food Cartons

CHICAGO—A hot plate, known as the Corley-Miller Model BJ Vertical Hot Plate, to be used for heat-sealing trays, cartons, or other packages for quick-freeze plants, is being manufactured by the Miller Wrapping & Sealing Machine Co. here.

Non-corrosive stainless steel and aluminum construction make it practical for use in locker plants and other damp locations, according to the Miller company. It's also especially adapted for trays or window boxes which must remain face up during the wrapping process to prevent spilling the contents.

The hot plate has a single piece stainless steel base with a slotted apron to grip the edge of a supporting bench or table. The slots are for screws or other permanent fastenings.

It is made of heavy aluminum with one bevelled edge for "spot" sealing and is equipped with an adjustable thermostat to set and maintain the sealing surface at a desired temperature. There is a heavily insulated lead-in cord and plug attached.

The overlapping seam is sealed first, either at the side or bottom of the package, then the paper at each end of the package is folded and pressed against the plate to heat seal.

It is available in either A.C. or D.C. and requires only 200 watts.

Change in 'Foamglas' Reduces 'K' Factor

PITTSBURGH — Reduction in the "K" factor of "Foamglas," a cellular glass insulation, has resulted from improvements made recently, claims Pittsburgh Corning Corp. here.

The number of cells per cu. ft. has increased from 5,000,000 to 10,000,000, thus providing additional thermal protection, the company says. Color of the insulation has also been changed from black to brown.

"K" (heat conductivity) factor at 50° F. is now rated at 0.40 B.t.u./hr./sq. ft./°F./in. as compared with the previous rating of 0.45 at this temperature, claims the company.

At 300° F. the "K" factor has been reduced from 0.70 to 0.55, it was said.

Composed of specially prepared glass, cellulated under intense heat, the new product is claimed to be fire-proof, water-proof, and vermin-proof. The company believes it is particularly adaptable for use in industrial buildings and equipment.

Cooling Towers, Nozzles Described by Binks

CHICAGO — Three new bulletins describing standard spray nozzles, atmospheric spray cooling towers, and induced draft cooling towers have been announced by the Cooling Equipment Div. of the Binks Mfg. Co. here.

Bulletin No. 450 describes the standard spray nozzles for air washing, cooling, brine refrigeration, and allied applications. Type S atmospheric spray cooling towers in capacities ranging from 10 to 1,200 g.p.m. are explained in Bulletin No. 800, while Bulletin No. 900 pictures small series type K, all steel, induced draft cooling towers in capacities ranging from 40 to 600 g.p.m.

New Weatherhead Lines Announced

CLEVELAND — Publication of a new refrigeration catalog completely describing the many new and improved Weatherhead refrigeration products was recently announced by the Weatherhead Co. here.

The catalog, illustrated in two colors, shows in cross-section and exploded views all of the various parts furnished by the Weatherhead Co. It is divided into six sections describing valves, dehydrators, strainers, manifold assemblies, accessories and fittings. Complete technical information including part numbers, size information, and list prices are also shown.

'Quick-Action' Vise Introduced by Grand

CHICAGO—Grand Specialties Co., Grand Ave. at Troy here, announces the manufacture of a completely new "quick-action" machinist's vise.

Known as the Grand 3-inch "Quikcet" vise, it is manually operated, but eliminates running the screw in or out to close or open the vise.

It is claimed that this new speed vise can be set and closed by simply pushing on the body of the free jaw, which slides in swiftly on a ratchet screw and two precision guide rods and tightens with a turn of the handle.

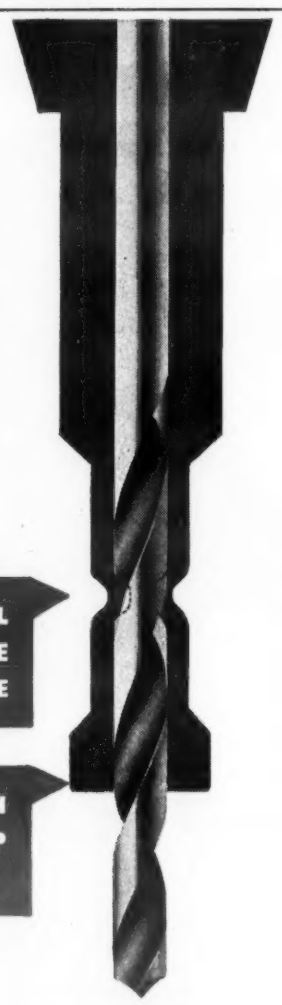
The vise is equipped with a trigger release pawl with ¾ inch of thread which holds the hardened screw under spring tension. It opens instantly to full 3 inches by the pressure of the thumb on the trigger release after the tension has been eased by a single turn of the loose-proof handle. It is then said to be ready, without further adjustment, for instant closing on any other work.

Chicago Seal Lists Replacement Parts

CHICAGO — Replacement unit stock No. 545 has recently been published by the Chicago Seal Co. here, describing Chicago seals and valve plates.

The stock list includes information on stock numbers, makes and models, sizes, and the list prices.

New Faso Protector Ends Drill Breakage!



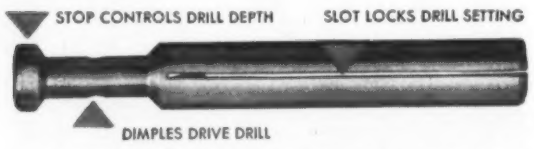
DIMPLES DRIVE DRILL CLOSE TO POINT WHERE WORK IS BEING DONE

STOP CONTROLS DEPTH OF HOLE... SPEEDS UP DRILLING TIME

NOW YOU CAN drill faster—*and not worry about breakage!* The new Faso split-shank drill protector & stop protects your drill at the weakest point. And it lets you set your drill for any desired depth.

The Faso drill protector & stop, now made by Hartwell, is available in selected sizes from 50 through F. Sizes 50 through 10 are held to ¼" outside diameter to fit standard drill chucks. Larger sizes are held to ⅜" outside diameter.

Hartwell also manufactures extension chucks in the above range of sizes, together with rod lengths of 6" and 11".



ASK YOUR JOBBER about the new Hartwell-made Faso line of drill protectors & stops, extension and angle chucks.

Single source for 779 production parts and tools

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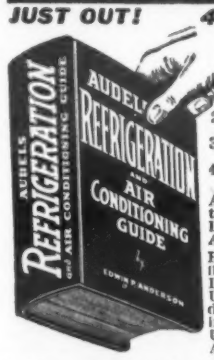
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1. Household Refrigeration
2. Special Refrigeration Units
3 Commercial & Industrial Refrigeration
4. Air Conditioning Systems

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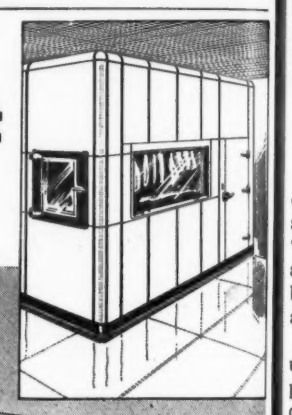
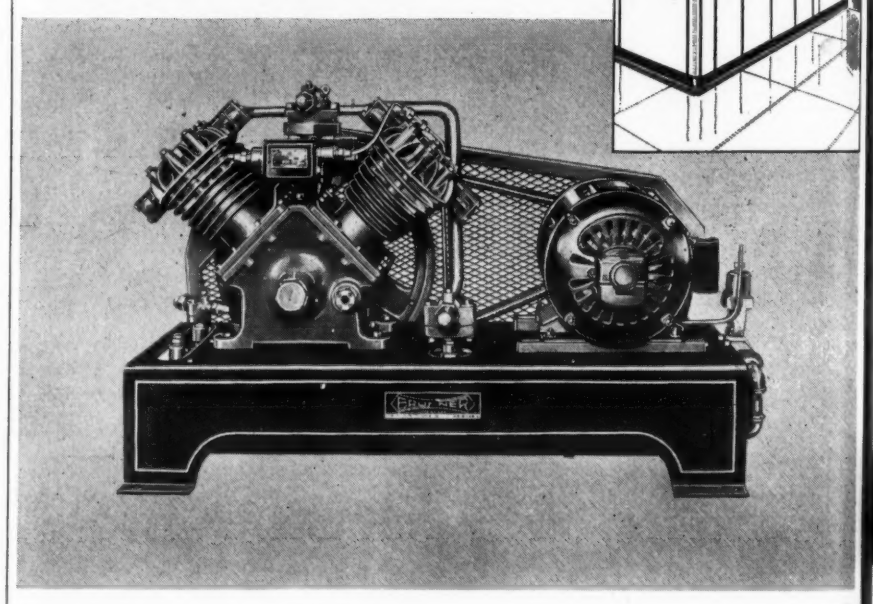
Regardless of how well it is built

...YOUR COOLER IS NO BETTER THAN ITS CONDENSING UNIT!





Appearance, quality of materials that enter into its production, and proper insulation are, of course, important factors in the construction of a refrigerated cooler. But of what avail all of these advantages if it is equipped with an inferior condensing unit—the heart of its refrigeration system? And remember that the compressor is the most important part of the condensing unit.

If you are contemplating placing an order for a cooler of any type, specify that it be equipped with a reliable condensing unit . . . a BRUNNER UNIT. Brunner engineers are experts in the design and construction of industrial and commercial refrigeration condensing units. Their specialized experience of more than 37 years in the design and production of compressors, qualifies them to give sound and valuable advice on any refrigerating problem. They are constantly rendering this service to designers and builders of all types of coolers—reach or walk-in—or for locker plants. This specialized experience has enabled them to design refrigeration condensing units to meet the refrigeration requirements of any type of cooler. Brunner Units have established an enviable reputation for service stability and accessibility as well as for reliability, efficiency and economy in thousands of applications throughout the world.

Ask Brunner to explain the new refinements of design and closer tolerances of their condensing units. There is a Brunner factory representative near you ready to discuss any problem of refrigeration you may have. He will be glad to see you. Write.

ARMY E NAVY
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For over 37 years the Symbol of Quality
BRUNNER MANUFACTURING COMPANY
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Detroit Code--

(Concluded from Page 1, Column 4)

war, however, has been the chief cause of delay in its enactment.

In addition to setting up regulations governing refrigeration and air conditioning installations, the ordinance provides for licensing of contractors, permits for the larger installations and repair jobs, and a schedule of inspection of systems.

Perhaps the most important change in refrigeration practice in Detroit which may result from the new code is the tightening of requirements for qualification as a licensed refrigeration contractor.

Formerly a person had merely to answer a questionnaire, which could be done, Detroit contractors say, by some people who could not really qualify as contractors.

EXPERIENCE REQUIRED

The new ordinance requires proof that the individual has actually had three years experience in installation of servicing of refrigeration systems, or is a graduate engineer with one year's actual experience, before a license will be issued.

Persons who wish to establish a contracting firm do not necessarily have to meet these qualifications themselves, but if they can't, they must employ some one who can qualify in order to obtain a license.

An important change in the code as it was finally approved as compared with its form as introduced in 1939 involves relaxation of regulations calling for automatic fire dampers in "direct" air conditioning systems employing 50 or more pounds of the following refrigerants: carbon dioxide, Carrene No. 1, "Freon-12," "Freon-21," "Freon-114," and "Freon-11."

DAMPER REQUIREMENTS

The final version of code now differentiates between size of the space conditioned if the system is "direct," i.e. evaporator coils cool the air directly instead of first cooling brine or water which then cools the air.

On 50-ton or higher direct systems using the above refrigerants in public assembly, residential, and commercial occupancies, fan controls and dampers may be omitted if the space to be conditioned is 1,000 sq. ft. or less floor area.

If the space is between 1,000 and 5,000 sq. ft. fire dampers only must be provided to cut off the refrigerant-containing part of the system from the ducts. Above 5,000 sq. ft. of floor area both fan controls and automatic fire dampers must be employed.

Kelvinator Moves--

(Concluded from Page 1, Column 4)

indicates that production by late next spring will be at a rate 50% greater than the heavy 1941 output.

Heretofore, Kelvinator and Leonard cabinets, built in Grand Rapids, were shipped to Detroit for final assembly. In the future, Detroit-built "Polarsphere" condensing units will be shipped to Grand Rapids, where all refrigerator final assembly will be completed.

The new program, however, calls for an even more radical change in procedure than a reversal of assembly operations, Mr. Mason declared. Of unusual significance—from the standpoint of reconversion speed and speedier delivery to retailers—is the adaptation of new assembly techniques to refrigerator assembly, he said.

"The transfer of our final assembly operations to Grand Rapids permits us to reconvert all of our manufacturing facilities much more rapidly than a reversion to prewar methods would have permitted," Mr. Mason said. "It will also expedite the manufacturing scheduling program, making possible a more rapid shipment of all types of models to retailers."

Alterations and improvements will increase capacity of the final assembly lines by about 70%, he said.

Manufacturing floor space will be increased by more than a quarter of a million square feet, with this construction to be completed by October.

Land recently purchased by the company in Grand Rapids is to play no immediate part in the company's postwar plans, Mr. Mason said.

England--

(Concluded from Page 1, Column 3)

Charles W. Hadden, president, Kelvinator of Canada, Ltd., in disclosing details of the offer, revealed that the matter will be discussed at a special meeting to be held in London, Ont., on Sept. 12. At this meeting, shareholders will be asked to approve the offer.

The British company has operated successfully in the past as an assembly plant and selling organization for products and parts and components supplied by the parent American company, and the Canadian firm has derived substantial commissions and dividends from it.

However, according to Mr. Hadden, conditions permitting imports into the Empire from the U. S. have become less favorable and indications are that it will be necessary to establish manufacturing facilities in the principal markets of the Empire. In regard to the English subsidiary, a large investment of new capital will be required to permit acquisition of enlarged and new premises and machinery.

Hotpoint Ranges--

(Concluded from Page 1, Column 3)

beginning of what the manager said would be "the first full year electric range production since the company made its "millionth" range in 1941.

"While the last models made in 1942 were produced with certain war-substitute materials, we are able to start up now with new supplies of what have been scarce items, such as bright trim, automatic timers, lamps, and aluminum deep well cookers," Mr. Rees said.

While the 1942 production was suspended before many units had been completed, each of the present models offer some refinements, although the company said they were "not unlike 1942 models."

Before the end of the year, Hotpoint expects to be producing ranges at a rate greater than the 1941 weekly average of 6,000 units, it was said.

Renew Suit--

(Concluded from Page 1, Column 5)

Recent favorable verdict of the United States Supreme Court in the case of Allen-Bradley Co. and others against Local Union 3 prompted the decision to resume litigation, according to the manufacturers' attorney, who explained the suit had previously been marked off the calendar by temporary agreement of both parties.

"Inasmuch as the damage suit will be continued by substantially the same group of manufacturers against the same union as the injunction suit recently decided eight to one in our favor by the Supreme Court," declared Mr. Merritt, "the one question before the jury will be the amount of damages."

Crosley Plan--

(Concluded from Page 1, Column 2)

demands make this production figure inadequate. Of the building additions planned for the Richmond plant, one 300 ft. section already is under way.

Production of radios will start this month, Mr. Schotters said, with the extent of early output dependent again upon the amount of materials available. Two plants will manufacture radios.

Crosley's recent affiliation with Aviation Corp. has projected the company's postwar plans considerably farther than ever before, R. C. Cosgrove, vice president and general manager of Crosley's manufacturing division, pointed out to the meeting.

Admiral Radios--

(Concluded from Page 1, Column 2)

purposes, Mr. Siragusa stated. By early 1946 these will be coming off the production line in volume.

Due to government revocation of restrictive order L-265, the green light was flashed for immediate radio production, and telegrams advising all Admiral distributors to expect a limited number of sets shortly were sent out.

He stated that first shipments would be followed up quickly by more ample consignments during the Thanksgiving-Christmas period to meet the anticipated buying rush of that season.

Production of a record-changer attachment for radios was begun on Aug. 22, and "sizeable quantities" were coming off the assembly line within 15 days.

The attachment is one which, when plugged into a home radio, converts the latter into an automatic phonograph. Admiral made a similar device before the war, but the one in production now is a vastly improved model, according to Mr. Siragusa.

By connecting this attachment to any type of home radio, whether table or console, the user gets not only phonograph performance but automatic record changing as well. It is portable, and can be placed on top or alongside the radio and attached or detached at will. The retail price, Mr. Siragusa said, will be lower than prewar prices for the same device.

Among its improvements is listed the changing a record in five seconds as contrasted to the prewar time of 10 to 15 seconds.

"We also expect to be in production at our main plant, 3800 Cortland St. here, in a very short time. Between the two plants," Mr. Siragusa asserted, "Admiral will have a production potential peak of 10,000 radio sets and 6,000 automatic record-changers daily sometime early in 1946."

Issuance of a new line of window display and inside-the-store advertising accessories to Admiral dealers throughout the nation was announced by Wallace C. Johnson, manager of field activities for the company.

By mid-September all dealers will have ample display material on hand for pre-merchandising, he declared.

The inside-the-store kit provides a new edition of Admiral's counter-dislay "X-Ray" book for consumer inspection. By the use of celluloid transparencies laid over one another the customer gets successive inside and outside displays and cutaway views of such things as "Slide-A-Way" in Admiral radio-phonographs, the new record-changer, inner construction of the forthcoming Admiral electric range, built-in quick freeze construction of the Admiral Dual-Temp refrigerator, and internal views of the forthcoming Admiral home freezer unit.

Window display material consists of four pieces, each 48 in. high and in color. One piece emphasizes the Admiral Regency model radio-phonograph; another features an open Dual-Temp refrigerator and stresses the "two-refrigerators-in-one" facilities, the built-in quick freezing locker on top, and the "no defrosting" feature of the regular compartment.

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Refrigeration Appliances, Inc.
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COOL DRINKING WATER ALWAYS AVAILABLE
OASIS Electric WATER COOLERS
OASIS means the best in clean, correctly cooled drinking water . . . 24 hours a day year in year out! Made by EBCO . . . pioneers in electric water coolers.
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IMPERIAL Flaring Tools
• built to conserve precious minutes
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Imperial Flaring Tools are especially valuable under current conditions. They help speed up tubing connection work and they make joints that are *tight* and *stay tight*.
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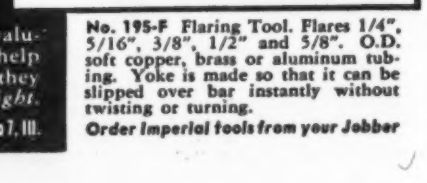

No. 195-F Flaring Tool. Flares 1/4", 5/16", 3/8", 1/2" and 5/8". O.D. soft copper, brass or aluminum tubing. Yoke is made so that it can be slipped over bar instantly without twisting or turning.
Order Imperial tools from your Jobber

SUNROC Water Coolers
ARE NEEDED IN EVERY OFFICE

A reliable source of cool, refreshing drinking-water, conveniently located, is necessary in every office, no matter how small its staff. Long before the war, Sunroc Water Coolers were delivering dependable, satisfactory service in thousands of business, professional, and Government offices.

Sunroc's post-war models, with the styling of fine furniture, will have even wider acceptance. These Sunroc Coolers will incorporate the advancements developed through exacting wartime production for the Government . . . a degree of stamina, economical, trouble-free operation, and adaptability to any surroundings previously unknown in this field.

Every community contains its tempting share of this important segment of Sunroc's national market . . . an almost inexhaustible field for the enterprising Sunroc dealer.

No product offers a more alluring prospect for steady, clean-cut profit than Sunroc Water Coolers, the finest in America . . . already in production for essential civilian use. Your regional Sunroc distributor will be glad to help fit you into the Sunroc picture. At your request, upon the coupon below, we will have him contact you. Sunroc Refrigeration Company, Glen Riddle, Pa.

"There's nothing like a cool drink of water!"
SUNROC Water Coolers
GLEN RIDDLE, PA.

SUNROC REFRIGERATION COMPANY
Glen Riddle, Pa.
Gentlemen:
Please send me full particulars on the Sunroc Water Cooler, and the story of "One Product, One Price, One Policy."
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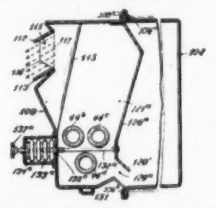
PATENTS

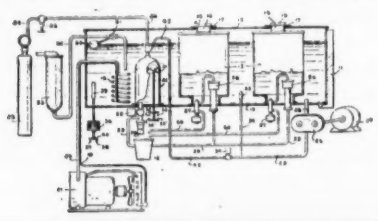
Weeks of Aug. 7 & 14

2,380,935. AIR CIRCULATING APPARATUS. John R. Boyle, Chicago, Ill., assignor to Westerlin & Campbell Co., Chicago, Ill., a corporation of Illinois. Application Nov. 26, 1941, Serial No. 420,460. 22 Claims. (Cl. 257—2.)



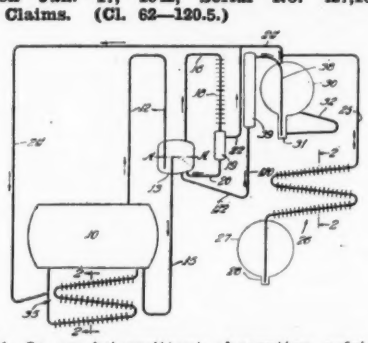
6. In air circulating apparatus for a room or like enclosure, the combination of a substantially horizontal air supply duct mounted on a wall of said room near the ceiling, a grille casing extending substantially longitudinally along the room side of said supply duct and adapted to receive air therefrom, means for controlling the flow of air from said duct to said casing, a grille slot in said casing through which air is discharged, and deflecting means associated with said grille slot and adapted to be set to deflect the air laterally at a predetermined angle or angles relatively to the length of said slot.

2,381,013. REFRIGERATION APPARATUS. Elo C. Tanner, Springfield, Mass., assignor to Westinghouse Electric Corp., East Pittsburgh, Pa., a corporation of Pennsylvania. Application Nov. 5, 1943, Serial No. 509,087. 5 Claims. (Cl. 62—141.)



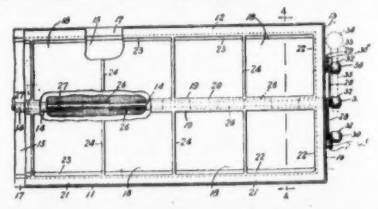
1. In combination, a tank for storing water, means for cooling the water in the tank, a carbonator, pump means for supplying water to the carbonator from said tank, means responsive to the liquid level in the carbonator for controlling operation of said pump means, and means including said pump means for agitating the water in said tank.

2,380,979. ABSORPTION REFRIGERATOR. John Lithgow, Oak Park, Ill., and Leslie K. Jackson, Cleveland, Ohio, assignors to Sears, Roebuck & Co., Chicago, Ill., a corporation of New York. Application Jan. 17, 1942, Serial No. 427,166. 4 Claims. (Cl. 62—120.5.)



1. In an intermittent absorption refrigerator, an evaporator comprising a receiver, a liquid supply header, a gas return header, and a plurality of tubes connecting said headers, said tubes communicating with said headers only in the upper portion of said tubes, whereby liquid may not be substantially drawn out of said tubes by the draining action, and drain means associated with one of said headers.

2,381,068. REFRIGERATING APPARATUS. Herschel Lutes, Detroit, and Jonathan J. Buzzell, Alpena, Mich. Application March 16, 1942, Serial No. 434,960. 18 Claims. (Cl. 62—108.5.)



1. An ice cube freezing unit for refrigerating machines, comprising a main tray formed to provide relatively movable sections each partitioned to form a series of compartments and a supplemental tray formed of an elastic material supported upon the main tray and having ice cube forming pockets depending within respective compartments of said sections, certain of the walls of said pockets being deformed upon movement of said main tray sections to effect a loosening of the frozen cubes from all of the walls of the pockets for ease in their subsequent removal.

(Continued on next page, Col. 1)

EDITOR'S NOTE: The U. S. Patent Office recently instituted a new service—a list of patents offered by the owners for licensing or sale. As a further service to its readers, Air Conditioning & Refrigeration News will publish lists of those patents offered for sale which pertain to this industry.

AVAILABLE FOR LICENSING OR SALE

Pat. 1,941,906. REFRIGERATOR. Patented Jan. 2, 1934. Provided with circular trays to rotate on antifriction tray supporting balls which also space the trays, and means to permit portions of the track sections to be detached and removed so that the trays can be tilted and withdrawn. Trays are larger than the door opening. (Owner) Issac Marinsky, 172½ Somerset St., Providence, R. I. Groups 33—71; 35—84. Reg. No. 129.

Pat. 2,023,622. AIR CONDITIONING APPARATUS. Patented Dec. 10, 1935. Consists of a compact unitary machine for the conditioning of air or treatment of gases, capable of being grouped to take care of buildings of various sizes. The air to be conditioned is conducted downward through an upward spray of water, the temperature of which is automatically controlled, and through various other heating or cooling means automatically selected. (Owners) John H. Textorius and Joseph F. Broderick. Address correspondence to Joseph F. Broderick, 605 West 112th St., New York 25, N. Y. Groups 33—62—69; 35—64—84. Reg. No. 156.

CHECK THESE FEATURES

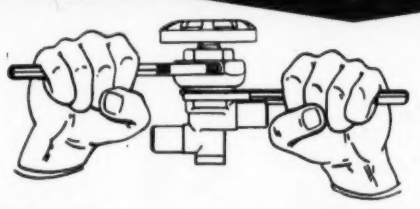


FIGURE 1—Shows wrenches properly applied to main body and auxiliary body for breaking the joint; the first step in disassembling the valve.

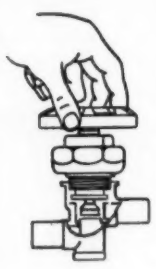


FIGURE 2—Observe here the entire internal assembly being removed by hand.

FIGURE 3—The entire internal assembly has been removed from the main body.

FIGURE 4—The main body, devoid of all internal parts, is now ready for cleaning and fluxing of the sweat tube connections preparatory to soldering.

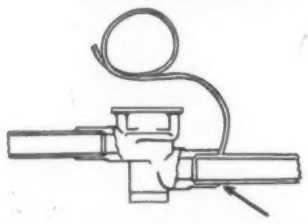


FIGURE 5—Refrigerant lines are soldered to the valve connections in the usual manner. Danger of distorting internal parts is eliminated because all these parts have been removed.

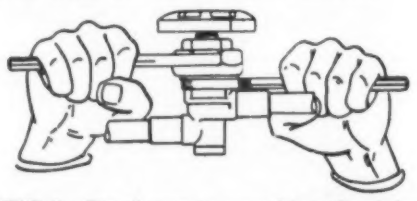


FIGURE 6—Final step is remaking the joint between the main body and auxiliary body. Note: Valve stem must be in full open position when tightening upper assembly into main body.

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SAN DIEGO, California. Wright Refrigeration Service requires first class service men at $1.25 per hour with time and half over 40 hours per week. Steady work, lots of overtime, and the best climate in America. WRIGHT REFRIGERATION SERVICE, 1337 India St., San Diego, Calif.

WANTED: Application refrigeration engineer. Excellent salary and chance for advancement. Permanent position. State age and qualification. Box 1785, Air Conditioning & Refrigeration News.

MIAMI, FLORIDA: Concern well established in air conditioning, ventilation, and industrial refrigeration, both ammonia and "Freon," representing nationally known manufacturers in finest present and postwar territory has position for engineer. Requires sound background estimating, drafting, and sales. Give full details, salary expected, enclose photograph, confidential. Box 1789, Air Conditioning & Refrigeration News.

APPLICATION ENGINEER: familiar with technical and practical applications of heat transfer equipment wanted by refrigeration and air conditioning manufacturer located in Michigan. Please advise background and qualifications. Box 1793, Air Conditioning & Refrigeration News.

WELL ESTABLISHED Metropolitan New York refrigeration parts supply jobber has opening for an experienced refrigeration parts man, sales and engineering background necessary. A good opportunity for one who can qualify. Box 1796, Air Conditioning & Refrigeration News.

COMMERCIAL application and service engineers. Large refrigeration firm with growing export business has openings in several territories for qualified refrigeration application and service engineers. Knowledge of foreign languages helpful. Write giving full details experience and references. Box 1797, Air Conditioning & Refrigeration News.

REAL OPPORTUNITY with Wisconsin manufacturer for man with a good knowledge of refrigeration and with practical experience in the installation of commercial refrigeration. Desire individual able to assume responsibility of refrigeration department. Include complete information and references in first letter. Write Box 1802, Air Conditioning & Refrigeration News.

DRAFTSMAN and engineer for heating, ventilation, and air conditioning. KROESCHELL ENGINEERING CO., 215 W. Ontario St., Chicago.

SALES ENGINEER. Good opening for Junior Executive, college graduate experienced in refrigeration and air conditioning for well established distributor. Immediate opportunity. In Philadelphia area. In reply state age, experience, and salary expected. All replies held strictly confidential. Box 1804, Air Conditioning & Refrigeration News.

BRANCH MANAGER. Wholesale Refrigeration Supply, capable taking full responsibility and supervision branch opening about October 1st Long Island, New York. Requires man thoroughly experienced in refrigeration supplies, good knowledge engineering. Salary to start $5,000 plus bonus. Full particulars first letter. Confidential. ALBERT HOFELD, 141 West 54th St., New York 19.

DESIGNING ENGINEER on commercial refrigeration, coolers, display cases and specialty production, capable of designing, engineering, and handling complete factory operation of small plant over 50 years in business. Location, Central U. S. Offering fine opportunity to qualifying party. Give past experience, references, and wages desired. Write Box 1800, Air Conditioning & Refrigeration News.

PATTERN LAYOUT man and sheet metal mechanics. Heating and ventilating engineer. Engineer familiar with metal fabrication work. All the above men are needed on high priority government contracts and for postwar work. KUHR BROTHERS, Savannah, Ga.

REFRIGERATION ENGINEER: One capable of assuming full responsibility for design and development of automatic control equipment for commercial refrigeration and air conditioning. An excellent opportunity for one with at least 10 years experience and thoroughly reliable. Box 1805, Air Conditioning & Refrigeration News.

POSITIONS WANTED

ENGINEERING DRAFTSMAN. 18 years experience; wood, metal products, 11 years with present firm, charge of production detailing, very good producer. Thorough knowledge of materials, production methods and assembly. Good personality. Consider similar position anywhere including South America. Free to travel. Box 1798, Air Conditioning & Refrigeration News.

NAVY CHIEF Motor Machinist Mate, soon to receive discharge, desires opportunity in refrigeration service. Had limited experience in civilian field, six years in Navy installation service, two years as instructor in Navy school. Any locality, at fair wage. References furnished. Troy Lindenmeier, 226½ S. Montgomery, Bremerton, Wash.

EQUIPMENT FOR SALE

HOME, FARM freezers. New. Limited supply available. All steel construction, finished in white Duco and stainless steel tops for use in Quick-Freeze and Storage. WILSON INDUSTRIES, 3533 Holland Ave., New York City 67. OL 5-6905.

HARTMANN AUTOMATIC wrapping machine, handles up to 2,400 packages per hr. cellulose, glassine, or wax paper, adjustable, suitable for frozen foods. Little used. Excellent condition. Prompt shipment. No priority. $1,000. Also small Gellman automatic wrapper, simple to adjust. 600 per hr. $500. COLLINS MACHINERY CO., 532 39th St., Oakland 9, Calif.

AIR CONDITIONING and refrigeration equipment for sale. New Marlo unit coolers, single and double blowers. 1½ and 3 ton condensing units. 10, 15, 20 cu. ft. frozen food "Dew Freeze" cabinets. Room 611, 705 Olive St., St. Louis, Mo.

DRY BEVERAGE coolers, porcelain double duty wall cases for dairy, vegetable, 4 and 6 can self-contained milk coolers. Farm freezers 7 to 20 cu. ft. self-contained. Water coolers, reach-ins, walk-ins, compressors, blower coils. All brand new. No priority. JORDON REFRIGERATOR CO., 235 N. Broad St., Philadelphia 7, Pa. Rittenhouse 6359.

FOR SALE. Remanufactured air and water-cooled condensing units ¼ hp. up to 1½ hp. Frosted food and ice cream cabinets. EDISON COOLING CORP., 310 East 149th St., New York 51, N. Y.

DRY BEVERAGE coolers 75" long, 28" deep, 39" high, sliding doors. Farm freezers. Standard and low temperature blowers, beer pumps. Stainless steel beer coolers and work benches. 3 and 5 ton Chrysler sealed low sides. All brand-new, no priority. MAJESTIC REFRIGERATOR CORP., 625 Broadway, New York 12, New York.

HOME FREEZERS 16 cu. ft. with freezer compartment. Galvanized steel throughout, copper coils soldered to outside of liner for smooth interior. Pure 4" corkboard insulation, size 29" x 70" x 33" high, 2 lift lids. $259 crated. ARTHUR BOOT CO., 1444 Lake Drive, Grand Rapids 6, Mich. Phone 8-0293.

FOR SALE: Reasonable. 1,000 Victor Ice Maker, electric frozen foods display boards and used coils. ALL-REFRIGERATED FIXTURES, INC., 437 Broadway, Buffalo, N. Y.

FOR SALE: 5 gallon Mills freezer head and mix compartment; model 25 complete with all parts, dasher, single phase motor, mix cans, etc. (no compressor). Carefully used and taken care of. Price crated $400. DUNLAP ELECTRIC CO., Chehalis, Wash.

FOR SALE: "Centraz" Vapor Seal—a waterproof adhesive that adheres to metal, wood, fibreboard, etc. For frozen food and ice cream cabinets, milk and water coolers and all refrigeration applications requiring vapor control. CHRISTY CO., INC., 1530 Olive St., St. Louis 3, Mo.

FROSTED FOOD Cabinets. 96" long. New, all steel. White finish. Two hinged stainless steel lids. Heavy insulation. Self-contained ⅓-hp. unit, ready to plug in. Vegetable cases, display cases, beverage coolers, reach-ins, walk-ins. GENERAL REFRIGERATOR & STORE FIXTURE CO., 856 N. Broad St., Philadelphia, Pa.

FOR SALE: New excess stock of Hi-Low Beer Faucets available immediately at a very attractive price. S. J. O'BRIEN SALES CORP., 124 West 124th St., New York 27, N. Y.

COMPRESSORS for sale: One 5 hp. and one 3-hp. water cooled Brunner with three phase motor in good condition. 5 hp. $400; 3 hp. $200. D. M. THOMAS REFRIGERATION SALES & SERVICE, 1236 Broad St., Augusta, Ga.

EQUIPMENT WANTED

WE NEED machines. Refrigeration and air conditioning equipment is in great demand now. A wire will bring you cash fast for used or surplus stock. Commercial, air conditioning and all specialties any quantity. E. M. FAIRBANKS COMPANY, 2548 East Tremont Ave., New York 61, N. Y.

FRANCHISES WANTED

JOBBER wants to represent air conditioning company that has 3 and 5 ton self-contained units. Also 1 ton for homes. Consoles. Room 611, 705 Olive St., St. Louis, Mo.

MANUFACTURERS AGENT wants additional lines for coverage of jobbers and manufacturers in Indiana, Ohio, West Virginia, Kentucky, and Tennessee. Excellent sales record. Interested in refrigeration, air conditioning, or industrial items. Box 1799, Air Conditioning & Refrigeration News.

TUNISIAN FIRM (Director, ex-sales leader of Frigidaire, Tunis). Specializing in the sale of refrigerators, having the necessary organization, wishes to make contact with important firms. Write to STAND DU FROID, Galeries du Colisee, Tunis (Tunisia).

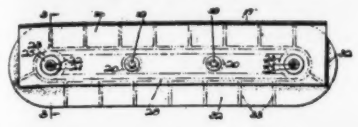
BUSINESS OPPORTUNITIES

BARGAIN: One of the oldest repair businesses in the south, 75,000 population plus Camp Chaffee, very little competition. $2,500 cash. No payment plan will be considered. Telephone and name will be worth this price. Call, wire, write PENO ROBINSON, Fort Smith, Ark.

Patents (Con't)

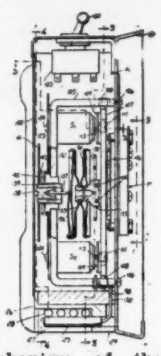
(Continued from preceding page)

2,381,069. REFRIGERATING APPARATUS. Herschel Lutes, Detroit, and Jonathan J. Buzzell, Alpena, Mich. Application June 1, 1943, Serial No. 489,282. 6 Claims. (Cl. 62—108.5.)



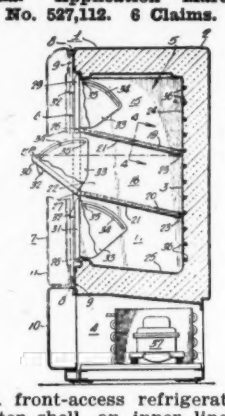
1. The combination of the freezing chamber of a mechanical refrigerator and a removable ice cube forming unit therefor, said unit comprising parallel members, rollers, journalled in and extending between the members, cooperative means carried by the members and opposed walls of the freezing chamber for supporting the unit, an endless belt trained over and about the rollers, pockets formed along the outer surface of the belt, the belt and the pockets being formed from a flexible material to which ice does not readily adhere, and means insertible through one of the opposed walls of the freezing chamber for driving engagement with one of the rollers to impart motion to the belt, certain of the walls of the pockets being distortable by the bending action of the belt in its travel about the said one of the rollers to free the frozen cubes therefrom for subsequent discharge from the freezing chamber.

2,381,427. AIR CONDITIONING. Sven W. E. Andersson, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware. Application Aug. 14, 1941, Serial No. 406,777. 31 Claims. (Cl. 257—3.)



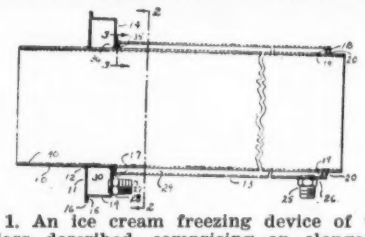
23. In mechanism of the character described, a control member, structure comprising a plurality of parts including a pin and a thermal element for operating said control member, said pin at opposite ends thereof being tapered to form more or less rounded points, said pin being frictionally held at said rounded points between two of said parts of which one is angularly movable, and resilient means for keeping said pin in position even when said two parts are spaced apart a distance greater than the length of said pin.

2,381,598. REFRIGERATOR CABINET CONSTRUCTION. Welton Paul Jones, Rydal, Pa., assignor to Philco Corp., Philadelphia, Pa., a corporation of Pennsylvania. Application March 18, 1944, Serial No. 527,112. 6 Claims. (Cl. 62—89.)



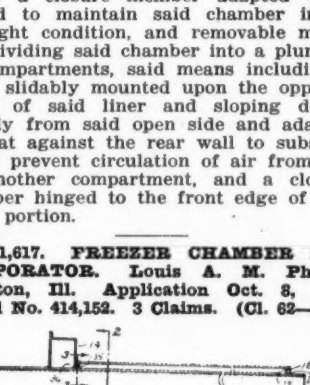
1. A front-access refrigerator including an outer shell, an inner liner defining a food storage chamber and having an open front, a closure member adapted when closed to maintain said chamber in an air-tight condition, and removable means for dividing said chamber into a plurality of compartments, said means including a shelf slidably mounted upon the opposite sides of said liner and sloping downwardly from said open side and adapted to seat against the rear wall to substantially prevent circulation of air from one to another compartment, and a closure member hinged to the front edge of said shelf portion.

2,381,617. FREEZER CHAMBER AND EVAPORATOR. Louis A. M. Phelan, Rockton, Ill. Application Oct. 8, 1941, Serial No. 414,152. 3 Claims. (Cl. 62—126.)



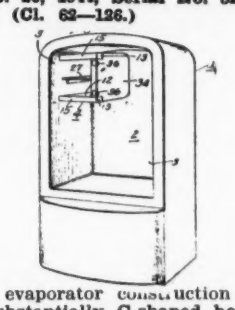
1. An ice cream freezing device of the class described, comprising an elongated inner cylinder, another cylinder positioned over said inner cylinder, one end being connected to the adjacent end of said inner cylinder, the other end having a short enlarged in diameter portion, an annular plate connected to the end of said enlarged portion and to said inner cylinder to form with said cylinder and said portion a narrow annular passageway around the greater part of the length of said inner cylinder and a relatively short and large in diameter annular extension thereto, such construction permitting independent expansion and contraction between said cylinders.

2,381,667. REFRIGERATION. Dan H. L. Jensen and Emil Harman, Philadelphia, Pa., assignors, by mesne assignments, to Philco Radio & Television Corp., Philadelphia, Pa., a corporation of Delaware. Application Oct. 23, 1943, Serial No. 507,432. 6 Claims. (Cl. 62—89.)



1. For a well-type freezing compartment, an ice forming unit adapted for introduction into and removal from said compartment, said unit comprising a substantially rectangular frame, means carried by the frame and disposed for engagement with portions of the compartment to suspend the frame substantially vertically therein, and a plurality of elongated tray-like members pivotally carried by the frame so that said tray members automatically assume an upright superimposed relationship upon placing the frame in substantially vertical position and automatically assume an upright side-by-side relationship upon placing the frame in substantially horizontal position.

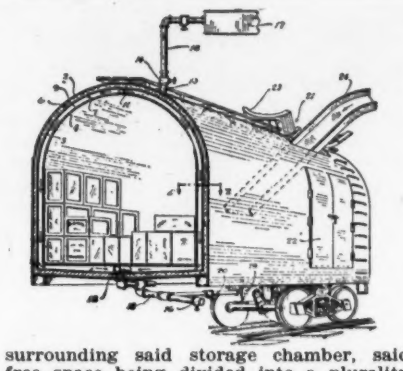
2,381,686. EVAPORATOR. Frank D. Peltier, Horsham, Pa., assignor to Philco Radio & Television Corp., Philadelphia, Pa., a corporation of Delaware. Application Feb. 26, 1944, Serial No. 524,106. 12 Claims. (Cl. 62—126.)



1. An evaporator construction comprising a substantially C-shaped body member having top, end, and bottom walls, a feeding header adjacent the outer edge portion of said bottom wall, and a suction header adjacent the outer edge portion of said top wall, said body member having refrigerant channels each of which has one end terminating in open communication with said feeding header and the other end terminating in open communication with said suction header.

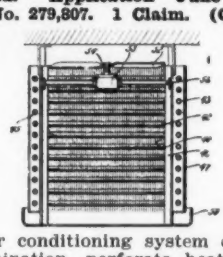
2,381,796. REFRIGERATOR CAR AND METHOD OF USING. Beverly E. Williams, Chicago, Ill., assignor to Industrial Patents Corp., Chicago, Ill., a corporation of Delaware. Application June 21, 1943, Serial No. 491,594. 5 Claims. (Cl. 62—15.)

1. A body for a vehicle adapted to transport perishable products which must be preserved under substantially constant temperature conditions, comprising a storage chamber, an enclosing wall surrounding the chamber, said wall being formed of a layer of insulation overlaying a substantially free space, means for enclosing said free space on all sides to form a fluidtight chamber substantially



surrounding said storage chamber, said free space being divided into a plurality of flow channels, means to deliver a temperature control medium into each of said channels whereby when said medium is delivered into each of said channels it may be circulated around the storage chamber.

2,382,502. AIR CONDITIONING APPARATUS. Lawrence A. Phillipp, Detroit, Mich., assignor to Nash-Kelvinator Corp., Detroit, Mich., a corporation of Maryland. Application June 19, 1939, Serial No. 279,807. 1 Claim. (Cl. 62—139.)



An air conditioning system comprising, in combination, perforate heat absorbers consisting of a plurality of single rows of extended surface finned coils of shallow depth, arranged to produce a vertical passageway, supporting means disposed at the ends of each row of coils and to which said coils are connected to produce said vertical passageway, a drain pan attached to said supporting means and constructed for substantially obstructing one end of said passageway, and circulating means supported by said coil supporting means and positioned within said passageway opposite to said drain pan.

(To be continued)

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Home Freezers on Sale At Macy's in N.Y.

NEW YORK CITY — New home lockers for frozen foods, at approved OPA prices, have been placed on sale at R. H. Macy & Co. here.

This showing comprises four models of 6, 10, 14, and 20-cu. ft. capacity, made by the Refrigeration Corp. of America, and priced to retail at $250, $350, $450, and $595 respectively. Delivery will be within two to 10 weeks, depending upon the model.

A feature in all of the models is "Freeztrol," a low temperature modulator, which makes possible the conversion of storage space into quick freezing space. In other words, those who grow their own vegetables and fruits can do their quick freezing at home by a simple turn of a dial, according to John M. Bess, president of Refrigeration Corp.

"Please understand," cautioned Mr. Bess, "that though these first new home lockers are not our postwar designs, they are superior to equipment manufactured in 1941 and 1942. They are brand new from the ground up, and embody all of the construction improvements and innovations that were developed under the most exacting government specifications for lockers which must stand up under world wide use. We expect to have the newly designed postwar models ready for exhibit and sale early in 1946."

The policy of Refrigeration Corp. for the present, with reference to the sale of the first group of new home lockers, is to confine operations to organizations such as Macy's and other department stores and dealers with whom the company has dealt for many years, said Mr. Bess.

"This does not mean," said Mr. Bess, "that there is to be any delay in the establishment of "Frigid-Freeze" home locker dealers in other than metropolitan areas under the franchise plan by which they are expected to operate frozen food centers as an integral part of the home locker show room."

Price Violation--

(Concluded from Page 1, Column 4)

the board of the company, issued the following statement:

"We do not at this time know the details of the charges that have been filed against us. We do feel, however, that this suit may develop to be a clarifying agent in the present confused OPA situation. We are sure that other small manufacturers, distributors, and dealers in all industries will follow the development of this case with keen interest and with the hope that the reconversion effort be still not further delayed and impeded by the present OPA policies."

Mr. Walters, the Chicago OPA chief, declared that the company's expectation of a future price increase "does not make it legal for it to start selling at prices higher than existing OPA ceilings.

"The company's action takes unfair advantage of the rest of the industry who are awaiting the final outcome of this discussion with OPA. At this stage of reconversion when consumer goods are critically scarce, the manufacturer who places his models on dealers' floors not only skims the cream of consumer demands but also may cause a permanent merchandise advantage over his competitors."

Industry Show--

(Concluded from Page 1, Column 5)

up the many problems of reconversion. Tentative program has been set up as follows:

Nov. 7—The entire day will be spent in Product Section meetings, and agendas for these meetings will be prepared by section chairmen.

Nov. 8—A representative of OPA will attend the meeting to discuss problems of the re-pricing program.

Nov. 9—This day's session will be devoted to sales management problems.

At the spring meeting March 4 to March 7 at the Stevens hotel in Chicago, conference booths 10 by 10 will be set up in the Stevens exhibition hall and will be sold to the members at cost. These booths will be used for conferences with refrigeration parts jobbers and service engineers.

Jobber Group 5 to Meet In Cleveland Sept. 28

CLEVELAND — Regional Group No. 5 (the North Central States Group) of the National Refrigeration Supply Jobbers Association will meet Sept. 28-29 at the Hotel Statler in Cleveland, reports James H. Downs of Refrigeration Supplies Co., Cleveland, chairman of the group.

The meeting will open with a luncheon Sept. 28, followed by a closed business session in the afternoon. A cocktail party has been planned at 5:30 p.m., with dinner at 8 p.m.

The meeting will close Saturday morning with an open business session. Manufacturers' representatives are invited to attend the Saturday meeting.

Puffer Resigns Post as Norge Vice President

N. TONAWANDA, N. Y.—Paul H. Puffer has resigned as vice president of Norge Division, Borg-Warner Corp., to become president of the Creo-Dipt Co., Inc., here, manufacturer of stained shingles.

Since last January Mr. Puffer has served as a Norge vice president, developing an employe and public relations program. For the preceding year and a half he had been director of postwar planning, following service as contact man with Washington during conversion to war work.

Associated with Norge for 11 years, Mr. Puffer was general sales manager before the war.

Freimann Is Promoted To Frigidaire Sales

DAYTON, Ohio—A. C. Freimann has been appointed assistant commercial sales manager for Frigidaire Division, General Motors Corp., announces P. H. Brennan, manager of the commercial sales division.

Mr. Freimann, who rounds out 18 years service with Frigidaire on Sept. 1, formerly headed the Frigidaire product development and application department which, for the past few years, had been exclusively engaged in contact work with the Army, Navy, and other war agencies to determine the refrigeration requirements of these agencies.

A graduate of the University of Detroit, Mr. Freimann became associated with Frigidaire as a salesman in the Detroit district in 1927. The following two years found him in the capacities of supervisor and sales manager in that area.

From 1929 to 1939 Mr. Freimann's activities originated from the home office in Dayton. He held the positions of factory regional sales engineer, factory representative, zone manager for the Delco-Frigidaire products, and manager of the automatic heating division prior to becoming manager of the product development department in 1939.

Detroit Contractors to Meet

DETROIT—Annual dinner meeting of the Refrigeration Contractors Association of Detroit will be held Sept. 19 at the Hotel Statler here, announces Raymond M. Shock, executive secretary.

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